Lectures
ON THE
PHYSIOLOGICAL PATHOLOGY OF THE BRAIN.

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LECTURE II.—PART X.

ON PARALYSIS LIMITED TO A LIMB OR TO SOME MUSCLES.

Facial paralysis can be produced by lesions in parts not belonging at all to the voluntary motor apparatus, such as the optic thalamus and the cerebellum—A paralysis, similar to that of the facial nerve, can be caused by disease of the cerebral lobes—Conclusions drawn from the facts related in this lecture, on paralysis of the arm, the leg, and the face, showing that either of these three parts can lose power from lesions in the most various parts of the encephalon, whether inside or outside the supposed limits of the voluntary motor apparatus.

THE cases I have mentioned of disease of the cerebral convolutions causing facial paralysis clearly show that this symptom may appear as well when the lesion is outside as when it is within the limits of the zone considered as containing the pretended psycho-motor centre for the face. Still more, some of those cases show that a lesion of certain convolutions of the anterior and middle lobes far from the site of that pretended centre, and even disease of the convolutions of one of the posterior lobes, can produce facial paralysis. It is proved by these facts that a lesion in almost any part of the surface of the brain can produce facial paralysis. I will now show that a lesion in parts which no one supposes to belong to the voluntary motor apparatus, either as centres or conductors, can also produce a facial paralysis. The parts I shall now speak of are the optic thalami and the cerebellum. As I have already, in the first lecture, shown that hemiplegia can appear from a lesion in those parts, and as I have already also, in this lecture, shown that a paralysis limited to the face can be produced by disease of those organs, I will merely relate now a small number of cases.

I will first show that *a lesion of the optic thalamus can produce a paralysis of the face together with hemiplegia.* Dr. J. Crichton Browne[1] relates a case of hæmorrhage in the right optic thalamus which had caused complete hemiplegia and paralysis of the cheek on the left side. In a case of Dr. Elliotson's[2] there was a very small amount of blood effused in the right optic thalamus, and still the face and limbs on the left side had been paralysed. Dr. Murdoch[3] has also published a case of complete paralysis of the face and limbs on the right side, caused by tubercles and softening of the left optic thalamus. All the rest of the brain was healthy. In a case published by my able friend Dr. F. Raymond[4] there was paralysis of the left side of the face and paralysis with choreic movements of the left limb, produced by a clot, the size of a walnut, in the right optic thalamus. These cases leave no doubt whatever that a facial paralysis can be caused by a lesion of the optic thalamus—i.e., by a lesion of a part which does not belong to the voluntary motor apparatus. No objection can be made to the significance of those cases by supposing that the symptoms may have been caused by a pressure on the corpus striatum, as in three of those four facts the amount of blood effused was not large, and in the fourth one (Murdoch's) there was no pressure at all. Besides, I will prove in the next lecture that a considerable hæmorrhage may take place in the optic thalamus without either a facial paralysis or hemiplegia.

I will now show that *a lesion of the cerebellum can produce paralysis of the face either alone or with paralysis of the limbs, without any intervention of a pressure on the pons Varolii.* The first case I will mention was published by my eminent friend Dr. Banks, of Dublin.[5] The face was paralysed on the *left* side, and the lesion was an encysted abscess (about half an ounce of pus) in the *right* half of the cerebellum. There was no other paralysis. No one will imagine that it was owing to a pressure on the pons Varolii that the facial paralysis appeared, as, if so, the face would have been paralysed on the *right* and not on the *left* side. The same argument applies to a case recorded by Cruveilhier.[6] There was facial paralysis on the *left* side, and no other lesion, except that the *right* side of the cerebellum contained two cysts, and that five or six ounces of serosity were found in the lateral ventricles. It may be said that the facial paralysis, instead of being caused by the cerebellar lesion, was due to the serous effusion in the lateral ventricles. Although it is most likely that the facial paralysis existed long before the occurrence of the serous effusion, I will say that, as I have shown already, it is possible that an effusion in both lateral ventricles may produce a paralysis only in one side of the face; but it is clear that a fact of this kind is just as much in opposition to the admitted theories as regards the mode of production of paralysis as is the fact of a cross facial paralysis caused by disease of the cerebellum. Lallemand gives a case, communicated to him by M. Rougier, in which there was paralysis of the whole *right* side of the body, the face drawn to the left owing to paralysis of its *right* side. The only lesion was softening of the internal parts of the *left* half of the cerebellum.

In the three cases I have just mentioned the facial paralysis was in the side opposite to that of the lesion. In other cases paralysis occurred in both sides of the face, seemingly produced by a lesion in one side of the cerebellum. Sometimes a facial palsy appeared on the side of the lesion in that nervous centre. As an example of the first of these two kinds of facts I will mention a case of Hillairet's,[7] in which the buccinator on the two sides and the whole orbicularis oris were paralysed, from a lesion of the left lobe of the cerebellum (a clot of blood the size of a walnut). There was also some blood effused in the two cerebellar fossæ; but no one will suppose that the facial paralysis was due to an alteration of the two facial nerves, as the muscles affected show that only some parts of those nerves had lost their action. As an example of the second kind of facts I will mention a case of Martineau's.[8] The face was paralysed in its lower part on the *right* side. It was the common form of facial paralysis that we observe in diseases of the cerebral lobes, and not that which we see when the pons Varolii is affected: there was no paralysis of the orbicularis oculi. The limbs were paralysed on the *left* side. The *right* lobe of the cerebellum was softened and pinkish. The rest of the encephalon was healthy.

It is clear from these facts that the cerebellum, which is neither a centre nor a channel of transmission for the movements of the face, can, under the influence of disease, produce a facial paralysis; and it seems clear also that a lesion in one half of that organ can cause paralysis in both sides of the face or in one only, and then in the opposite side or in the corresponding one. I need not point out how much these facts are contrary to the views that are almost universally held about the mode of production of paralysis in cases of disease of the intra-cranial nervous centres.

I now pass to another kind of demonstration. It is well known that usually, in cases of paralysis of the face due to disease of any part of the brain excepting the pons Varolii, only a small number of facial muscles lose their action. The orbicularis oculi and some other muscles generally remain free from paralysis. Still, as stated by Dr. W. H. Broadbent[10] in a most original paper, for a short time after a severe attack of apoplexy all the facial muscles are more or less paralysed. Dr. J. Hughlings Jackson[11] says that

[1] The West Riding Lunatic Asylum Medical Reports, vol. v., 1875, p. 232.
[2] THE LANCET, 1831-32, vol. i., p. 729.
[3] Journal Universel et Hebdomadaire de Médecine et de Chirurgie, 1830, vol. i., p. 365.
[4] Étude Anat. Physiol. et Clinique de l'Hémichorée, &c. (Paris, 1876), p. 54.
[5] Dublin Hospital Gazette, vol. iii., 1856, p. 43.
[6] Anatomie Pathologique, 37ème livraison, pl. v., p. 3.
[7] Loc. cit., vol. i., p. 134.
[8] Archives Gén. de Médecine, &c., 5e série, 1858, vol. xi., p. 165.
[9] Quoted by Gintrac, loc. cit., vol. viii., p. 348.
[10] British and Foreign Medico-Chirurgical Review, April, 1866, p. 472.
[11] Clinical Lectures and Reports, by the Staff of the London Hospital, 1865, vol. ii., p. 309.

Dr. Woodman, the resident medical officer of the London Hospital, has ascertained that in cases of recent hemiplegia the orbicularis is a little weakened. I have often found that for a time, in cases of softening, almost as much as in cases of hæmorrhage, all or almost all the muscles of the face are paralysed. But it is hardly known that a paralysis of all the muscles of the face can persist for a long time after an attack of hæmorrhage or softening of the brain, and still more that this facial paralysis can be the most prominent, indeed, even almost the only, if not altogether the only, paralytic manifestation. I will show that there are facts which seem to prove the correctness of these statements.

Dr Broadbent, in the paper I have already quoted (p. 477), puts forward the following hypothesis:—"That where the muscles of the corresponding parts on opposite sides of the body constantly act in concert, and act independently, either not at all, or with difficulty, the nerve-nuclei of these muscles are so connected by commissural fibres as to be, *pro tanto*, a single nucleus. This combined nucleus will have a set of fibres from each corpus striatum, and will usually be called into action by both, but it will be capable of being excited by either singly, more or less completely, according as the commissural connexion between the two halves is more or less perfect." I will discuss in the next lecture the value of this ingenious supposition, which is not without a certain measure of truth. I will merely say now that if it were perfectly exact we should not either see, as we do sometimes, a paralysis of all the muscles of the face caused by a lesion in one half of the brain, or find a complete absence of paralysis of the orbicularis oculi and of some other facial muscles in cases of disease of the two sides of the brain (the two corpora striata, the two crura cerebri, and even the two sides of the pons Varolii in its upper and front part). We must, therefore, look for some other explanation for the non-appearance of paralysis of certain facial muscles in the ordinary cases of hemiplegia. It is evident that there is only a difference of frequency as regards paralysis between those muscles and those of the leg and of the arm. Beginning with the parts that are most frequently paralysed, and finishing with those that are most rarely palsied, we find that they are to be classified as follows:—1st, the arm; 2nd, the leg; 3rd, the lower muscles of the face; 4th and last, the upper muscles of the face, including the orbicularis oculi. But, as I will show in the next lecture more fully than I have yet done, a lesion in almost any part of the brain can produce a paralysis of either the arm, the leg, or the lower part of the face; while, on the other hand, any part can be destroyed without paralysis; so that what relates to the muscles of the arm, the leg, and the lower part of the face is *essentially* similar to what relates to the muscles of the upper part of the face (orbicularis oculi, frontalis, &c.). In the case of these last muscles we find, as I will now show, they sometimes lose their power of action from a lesion in the brain above the pons Varolii.

The following facts certainly give good ground to my statement that *a paralysis of all the muscles of the face, similar to that which we observe when the trunk of the facial nerve is divided, can be caused by an affection of other parts of the brain than the pons Varolii.* In a very able paper in which the writer, Dr. Duplay[12] has tried to establish that a paralysis *of the whole facial nerve* is sometimes produced by a cerebral lesion far away from the place of origin of that nerve, he gives a number of cases in support of that view. I will only mention here most briefly two of these cases.[13] An old man was suddenly attacked with numbness, formication, and paralysis of the left side of the face. This paralysis was complete in all the muscles of the cheek, the mouth, and the eyelids (only the orbicularis). There was no paralysis elsewhere. After six months the paralysis of the two left eyelids remained, but the other muscles had recovered their function. The patient died of pulmonary apoplexy some eighteen months after the attack of facial paralysis. An old hæmorrhagic cyst, able to contain only a pea, was found in the right corpus striatum. The whole encephalon, including the convolutions, and the pons Varolii, were found perfectly healthy. The left facial nerve, examined most carefully in all its length, was also found in quite a normal condition.

In another case a paralysis of all the muscles animated by the right facial nerve occurred suddenly, together with some anæsthesia of the same side of the face and a marked diminution of intelligence. Within a fortnight all the symptoms had almost entirely disappeared. Six times after this the patient was seized with symptoms of brain disease, and he died ultimately from meningitis. The cortical layers of the brain were found healthy. There was a number of small hæmorrhagic cysts (eight in the left hemisphere and four in the right) in the white substance of the brain. The author believes that one of the effusions of blood in the left hemisphere had caused the right facial paralysis, and it would be difficult to deny the correctness of his conclusion.

A more decisive case has been published by Diday, of Lyons.[14] A woman was attacked with paralysis of the cheek, the lips, the nostril, and the eyelids on the left side. In about six months hardly any trace of that paralysis existed. A few months later she died of pneumonia and pericarditis. Evidence of an old and small effusion of blood was found in the right optic thalamus. The facial nerves in all their length were alike in the two sides, and without any appearance of alteration.

In a remarkable case of Romberg's,[15] which I have already mentioned, the patient, a woman, had two apoplectic attacks, causing loss of speech and left hemiplegia. She recovered from the paralysis of her limbs, but speech was not restored, and her face on both sides remained absolutely deprived of voluntary movement. Forehead, eyebrows, eyelids, nostrils, cheeks, and chin were all paralysed. She died of cholera, and the autopsy showed "at the external edge of the right hemisphere, where the anterior lobe adjoins the middle one, an hæmorrhagic cyst, by which two gyri were destroyed." One might be inclined to suppose that a lesion had existed, although not found, in either the pons Varolii, the medulla oblongata, or the trunks of the seventh pair of nerves. But such a supposition must be abandoned when we know that, although the voluntary power was completely lost, every emotional action of the face remained. If any objection were made to our admitting that the lesion found in the right side of the brain was the cause of the double facial palsy, I would say that I have shown, by many facts in this lecture and the preceding one, that a paralysis can appear in the two sides of the body (face, arm, or leg) from a lesion in only one side of the brain.

I believe that the first of the two cases of Duplay, that of Diday, and also the fact, which all practitioners who have seen many cases of recent apoplexy have witnessed, that the orbicularis oculi is often more or less paralysed in those cases, will leave no doubt that a paralysis of the whole facial nerve or of most of its branches can be caused by disease of the cerebral ganglia or of some other part of the hemispheres of the brain.

Having now come to the end of the facts I wished to mention as regards facial paralysis in brain disease, I will sum up what I think I have proved in this lecture as regards local paralysis in the arm, in the leg, and in the face. I have shown—

1st. That a lesion in the anterior lobes, outside of the parts which are supposed to be psycho-motor centres, can produce a paralysis of the arm alone, or of the leg alone, or also of the face alone.

2nd. That a lesion in the middle lobes, outside the parts supposed to belong to the voluntary motor apparatus, can produce a local paralysis either of the arm, the leg, or the face.

3rd. That a lesion in the posterior lobe, which is considered as having no share whatever in voluntary movement, can produce a local paralysis in the arm, in the leg, or in the face.

4th. That a lesion in the optic thalamus, a part which does not belong to the voluntary motor apparatus, can produce a local paralysis in either the arm, the leg, or the face.

5th. That lesions in various parts of the corpus striatum can produce paralysis of the arm alone or of the leg alone, or also of the face alone.[16]

6th. That lesions in the base of the brain or in the cere-

[12] De la Paralysie Faciale produite par une Hémorrhagie Cérébrale (Paris, 1854), reprinted from L'Union Médicale des 19, 23, et 26 Août, 1854.
[13] Cases 1, p. 9; and 3, p. 15.

[14] Gazette Médicale de Paris, 1870, p. 46.
[15] A Manual of the Nervous Diseases, translated by Dr. E. H. Sieveking, 1843, p. 278.
[16] For the five above conclusions see THE LANCET, Jan. 13th and 20th, 1877, p. 40, and p. 78, and April 7th, 1877, pp. 485-6.

bellum can produce a local paralysis in the arm, the leg, or the face.

7th. That a lesion occupying almost the whole of one side of the brain or lesions in many parts of a hemisphere can produce a paralysis of the arm alone, and sometimes also of the leg alone or chiefly.

8th. That lesions in the two sides of the brain can produce a paralysis of one arm, of one leg, or of one side of the face alone.[17]

9th. That a lesion in or outside the voluntary motor parts of the brain can produce local paralysis of either the arm, the leg, or the face, or of the arm and the face together, on the same side where it exists.

10th. That a lesion in one or in both cerebral hemispheres in or outside of the supposed voluntary motor apparatus, or in the cerebellum, can produce paralysis of both arms or of both legs.[18]

11th. That a lesion in one side of the brain away from the pons Varolii can produce paralysis of the face on one side and paralysis of the limbs on the opposite side.[19]

12th. That a lesion in almost any part of the brain outside of the parts supposed to belong to the voluntary motor apparatus, can produce a paralysis of some muscles of the face (and always the same), associated with more or less paralysis of one or two or three limbs.

13th. That a lesion in one side of the brain can produce paralysis in both sides of the face.

14th. That most cases of disease of the convolutions of the brain are in decided antagonism with the views of the localisers, as regards the pretended motor centres for the arm, the leg, or the face.

15th. That a lesion in the cerebral lobes can produce a facial paralysis similar to that which we observe in cases of a lesion of certain parts of the pons Varolii, or of the trunk of the facial nerve.[20]

The above conclusions lead forcibly to the necessity of throwing aside altogether all the admitted theories or suppositions concerning the localisation of pretended psycho-motor centres in certain parts of the brain, and also all the admitted views as regards the mode of production of paralysis in cases of organic disease of the brain. In the next lecture, after having brought forward many other arguments against the theories and views now admitted about motor centres and paralyse, I will try to establish new views concerning localisation and the mechanism of production of paralysis.

ON THE

TREATMENT OF ANGULAR CURVATURE OF THE SPINE BY THE PLASTER-OF-PARIS BANDAGE.

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ANGULAR CURVATURE of the spine, always a result of caries in one or more vertebral bodies, is among the most intractable maladies with which the surgeon has to do. The cause of this intractability, not the origin of the disease, is that which more especially interests us now. When, then, from any cause one or more of the bodies have been partially eaten away on their front surfaces by ulceration, the column above this point inclines very considerably forward; the weight of the body is thrown on the anterior aspect of the bones, in the retreating angle formed by the bent spine—that is to say, at the point of disease. This causes increase of pressure on the ulcerating bone, and I need hardly point out that any undue pressure at an already inflamed spot favours and increases the tendency to caries. Besides mere weight of body there is another cause of pressure—namely, the contraction of abdominal muscles, which in nearly every case of angular carvature may be felt hard and contracted beneath the skin. This condition is, I believe, produced by irritation of the nerves as they pass from the interspinal foramina. Moreover, movement, even the very slight movement that takes place between the vertebræ, helps very materially to keep up diseased action. These three conditions cause the inveteracy of curvature.

The natural, and, indeed, the only, cure of vertebral caries is by anchylosis, which means that new osseous matter, thrown out by the adjacent healthy or somewhat irritated parts, binds together and consolidates the whole number of diseased vertebræ into one compact mass of bone. This new matter is not, of course, formed from parts actually ulcerating, but by the neighbouring periosteum either over less inflamed parts of the carious bones or over neighbouring bones sufficiently near to be irritated by the disease, or from both such portions of membrane. Also it must be observed that the districts which, when inflamed, are destined not to ulcerate, but to produce fresh bone, must be in such position as to be subject only to little pressure; otherwise they might easily overstep the quantity of action necessary for a formative, and pass to that which leads to destructive processes, like the original malady. Such places are, during the continuance of the disease, generally at the sides of the vertebræ; hence there results first in that part a series of arches and buttresses which unite the healthy bone below to the next sound one above, while any still healthy parts of an intermediate carious bone throw out struts and spandrils to join the newly-formed bridge.

As, however, to the production of this new osseous structure absence of strong pressure is necessary, so for its solidification and union with the older bones considerable immobility is essential; for the material, which afterwards becomes bone, is, when first formed, not a hard substance, but a soft easily-compressible tissue, which moulds itself to the morbid shape of the column, twists or bends with each movement of vertebræ, and changes with the increasing angle of the spine, until it is hard enough to preclude motion and strong enough to prevent further collapse. This leads us naturally to perceive how the production of anchylosis should prove curative to the caries—viz., by the entire prevention of movement and of pressure. It also furnishes us with the necessary guide for treatment, if only it could be successfully followed—viz., to imitate nature in preventing both these conditions.

We thus come to consider two principles of treatment which have at different times found favour. The one is directed to making the ulcer as small as possible, by allowing collapse of the vertebræ above and below; the other aims at keeping those bones asunder. The former of these, enjoining rest, chiefly by means of recumbency, obviates that part of the pressure which is caused by superincumbent weight; but the other part, that by muscular action, is ignored. One sees such patients worn with long lying, bending up more and more, till at last those who get through the treatment rise from their beds with the deformity as fully developed as the circumstances would permit. What a weary matter it is, too, this condemnation to a bed or couch for years, one not at all likely to promote that state of health which is needed for the cure of strumous ulcerations, as well as for the establishment of such sthenic actions as might promote anchylosis.

The other method—that which aims at minimising the deformity by keeping the bones apart—effects at the same time diminution of pressure, especially at the front edges of the vertebræ. For a great many—indeed, for several hundred years, mechanisms for stretching the spine have been alternately vaunted and discarded. Mr. Chesshor, about sixty years ago, used to stretch his patients by means of a sort of rack, and fixed on the trunk, while thus elongated, a machine not unlike the spinal support of the present day. He failed to do much good, not, I believe, because the idea was faulty, but because all these mechanisms are nearly as futile for angular as they have been shown to be for lateral curves. They do, indeed, succeed for a time in taking some of the weight from the spine, by upholding the shoulders, but the mechanism soon gives and gets out of gear—it cannot fit close enough on the pelvis &c. to support any great amount of weight. Nevertheless, as some means to keep the spine from col-

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[17] For conclusions 6th, 7th, and 8th, see THE LANCET, Jan. 27th and April 7th, 1877, pp. 117, 118, 119, and 468.

[18] For this conclusion and the preceding one, see THE LANCET, Feb. 3rd and April 28th, 1877, pp. 155 and 599.

[19] See THE LANCET, April 28th, 1877, pp. 590 and 600.

[20] For the last four conclusions see THE LANCET, April 28th, May 19th, and June 9th, 1877, pp. 600, 709, and 827.

lapsing (the characteristic of this treatment) must be used, a great many modifications and changes have been introduced, which fail to do more than show the unsatisfactory nature of the whole machine.

But, as I have said, the idea is correct. Straightening the spine so as to annul pressure is the first step; but how to keep away pressure by some really effectual yet light appliance has been the difficulty, and this has been solved by Dr. L. Sayre. The plan is simple. The patient is to be suspended by the axillæ and head for a few minutes, while a plaster-of-Paris bandage is put on rapidly and allowed to harden. During this suspension, the weight of pelvis and lower limbs straightens to a certain degree the spine, and then the plaster, when the patient is allowed to stand, prevents the figure falling forward again; thus keeping the retreating angle open and obviating pressure on the front of the vertebræ.

The difficulties are these. 1stly, to render suspension innocuous and painless; 2ndly, avoidance of injurious pressure on bony prominences by the plaster; 3rdly, to make due allowance for respiratory movement, and yet to apply the bandage sufficiently firm to give full support.

The first of these embarrassed me for a considerable time, until, by using a steel cross and causing the padded straps to cross each other, I obtained a means whereby pressure on the axillary nerves is avoided. My head-stall, though simple, would occupy much space to describe, further than to say that both chin and occiput are included in the mechanism.[1]

The procedure is thus carried out. When all is ready, the apparatus found to fit comfortably, and assistants duly instructed, a leaden wire is laid on the spine, and an accurate pattern of its curve is taken. The height of the figure is also measured. Then the patient is suspended, and a flannel bandage rolled upon the figure from about the level of the trochanters to the armpits. A small pad should be placed over each anterior spine of the ilium, and if we are dealing with a young woman a layer or two of wadding should be placed between the mammæ and also on the outer side of the glands. I also fold a napkin three or four times, and place it over the central parts of the abdomen. Over all these a prepared plaster-of-Paris bandage is applied, more plaster is rubbed in, and the whole allowed to become very nearly hard. The patient is then taken horizontally out of the sling and laid on a couch, the pads over the crista ilii and the napkin over the abdomen are withdrawn, and thus a space is left over each prominence so as to avoid pressure, and also, over the abdomen, room for respiration. In a few minutes more the plaster is quite hard, the patient may be placed on his feet, and the height of the figure is again measured. In my experience, it increases from three-quarters of an inch to two inches. The wire should be traced on paper, and the pattern dated and put aside for future comparison.

The patient, if the bandage have been skilfully applied, feels much more comfortable, and is able to stand, even to walk, with much greater ease than before. He should, indeed, be allowed, even encouraged, to get about. The bandage will continue on the figure for a time, which depends partly on the care taken to avoid chafing, partly on the docility of the patient, partly on the quality of the plaster; but if any smarting or other symptoms of abrasion occur at spots away from the edge, and out of reach of any interposed pad, it is better to remove the whole thing and reapply it with additional precautions. The second application can generally be borne longer than the first, about ten or twelve weeks. During this time, as absence of pressure is secured, cure by anchylosis goes on by rapid strides, and the more rapid because the patient's health is so much better than it can be when he is condemned to a bed or couch. There is also in this plan the additional advantage that the spine becomes fixed in as straight a posture as possible, instead of, as in the treatment by recumbency, in as crooked a posture as can well be attained.

Now, there are certain points about the management of abscess; the making of fenestræ and the care of edges, whose description would now occupy too much space. I hope, at a future time, to describe these matters fully, and to relate some of my cases.

[1] It is only fair to Dr. Lewis Sayre to say that in some minor matters I have departed from his method of management.

A CASE OF HAMMOND'S "ATHETOSIS";

WITH NOTICES OF SOME OTHER CASES, AND REMARKS.

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I THINK it desirable to record the facts of the following case, in the hope that the unusual character of the disease, and its freedom in this instance from some of the complications indicated in the cases which have been previously published, may attract the attention of the many observers now interested specially in this class of diseases. It would give me great pleasure to receive any useful suggestions bearing either on diagnosis or treatment; all the more because the only previous case of an equally definite and uncomplicated character which has occurred to me is now withdrawn from observation, after a long course of various remedies applied in succession, and absolutely in vain. This case, which I believe to have been the first recorded one in this country, and the first after Dr. Hammond's original cases, was introduced to my notice by my friend Dr. Forrest in 1877; was under treatment for some months in the Royal Infirmary; was exhibited to the sectional meeting of the Medico-Psychological Association in Glasgow on June 10th, 1873; and is included in the report of that meeting in the *Journal of Mental Science* for July, 1873, p. 311. The subject of it—a boy aged fourteen years, who had been affected with the disease since he was three years old—left Glasgow suddenly along with the family, and is known, I believe, to have gone to America; but I have not been able to trace them, otherwise I should have directed, if possible, Dr. Hammond's special attention to the case. The present case is a nearly, if not quite, uncomplicated one, in a child; and it forms, along with the preceding one, and another recorded in "Virchow's Archiv" for May, 1876, a group of three very similar instances of athetosis originating before the age of puberty, and in otherwise healthy individuals; while both of Dr. Hammond's cases were in adults, intemperate or epileptic, and Dr. Claye Shaw's cases were still more complicated.[1]

Margaret R——, aged seven, admitted to the Western Infirmary, Glasgow, on April 3rd, 1877.

Note by Dr. Gairdner, April 5th. — This seems to be a typical case of "athetosis," affecting chiefly the left hand and arm, and to a much less degree the left foot and leg. The description of detail is postponed, as it seems important to-day to obtain the statement of the child's mother and grandmother, who are present. Patient is a quick, intelligent child, with florid complexion, and well nourished. She is said to have had good health, with the single exception of the disease above adverted to, and to have been, if anything, rather emotional, but quite normally affectionate and natural in her demeanour in the family. There are, so far as can be discovered, no instances of nervous disorder of any kind among the relations; but on the father's side

[1] The history of "athetosis," as a distinct and separate subject of medical inquiry, is briefly as follows. Dr. Hammond's first case, a man aged thirty-three, was exhibited at his clinique at the Bellevue Hospital in 1869, and afterwards detailed, along with another almost similar case, a patient aged thirty-nine, reported by Dr. Hubbard, of Ashtabula, Ohio, in the first edition of Dr. Hammond's well-known "Treatise on Diseases of the Nervous System," in 1871. The sixth edition of the same work (1876) contains the same two cases, with references to other cases briefly recorded by Dr. Clifford Allbutt and Dr. Ritchie in this country, to the memoir by Dr. Claye Shaw, and to my own previous case, of the details of which, however, Dr. Hammond seems imperfectly informed, from his not having seen the original reference. One or two other cases are vaguely referred to as having occurred in America, but none of them with details. Dr. Claye Shaw's paper on "Athetosis, or Imbecility with Ataxia," is in the St. Bartholomew's Hospital Reports for 1873, vol. ix., p. 130. Finally, Dr. Gowers has contributed to the last volume of the Medico-Chirurgical Transactions a very valuable paper founded on eighteen cases, almost all complicated, and in adults, though often associated with a history of infantile paralysis. Even while revising this note, I am informed of yet another case of athetosis, which was under the care of Dr. Charteris in the Royal Infirmary of Glasgow last summer, and which will probably be published in THE LANCET. The patient was a female child, aged five.

little can be made out, as he went some time ago to America and is known to have died there.[2]

The present complaint is stated to have arisen gradually about a year ago, and it appears that there is a vague impression of its having arisen from fright—viz., from a man pursuing the child in the park; but, on careful inquiry, it does not seem clear that the motor affection began at this time, only she came home very much agitated, and soon after it began to be noticed that there was an awkwardness in the movements of the left hand and an unwillingness to use it. So gradual, however, was the progress, and so little was it at first suggestive of disease to those who observed her, that her grandmother says they used to chide her for not using the left hand, and it was only after a time that her positive inability to control it became a recognised fact; the first observation of a definitely morbid kind to her parents being that she could not open her hand at will.

It is about a year since the very first observation of anything unusual in her hand took place; and about a month afterwards a kind of lameness was observed in her left foot, together with a habit of sticking her hand out behind her back; this was supposed, at first, to be owing to the effort to balance herself. About the same time, but for a very short period, a kind of slowness in her speech was noticed, not amounting to stammering or stuttering, nor yet (so far as can be made out) to anything of the nature of paralytic thickness of utterance; but both of her relatives now present concur in stating that this has entirely passed away. They also think that the state of the hand has improved during the past month or two, but the mother says that this "comes and goes," and cannot be depended on. Patient was under treatment in the Royal Infirmary for several weeks last summer, but it appears that in consequence of a change of attendants treatment was not very steadily pursued.

There has been no disorder of the senses or of the mind at any time. Digestion has been good throughout; and there has been no trouble with the bowels or the bladder. The bodily condition speaks for itself to confirm the general statement of previous good health. The first dentition was almost without accident, but her mother states that she had one convulsion when about eighteen months old. The second dentition is now in progress. The permanent lower incisors and the two inner upper incisors are well forward; and I have the authority of Dr. Woodburn, of this city, for stating that they are, on the whole, well developed, and certainly not characteristic of any specific or hereditary malconformation. Mr. Jonathan Hutchinson, to whom a cast of the teeth was sent, in consequence of a doubt raised as to the interpretation of some slight apparent irregularities, authorises the statement that the teeth may possibly be "mercurial teeth," but are certainly not in any degree indicative of hereditary syphilis.

She was rather restrained from walking early, being a heavy child; but, on the whole, her first walking and her speaking were perfectly natural. There are no evidences of a rickety conformation. She has had measles and chincough, but both of them mildly. She has evidently slight bronchitis at present, but it has not been of long standing, nor has it ever been severe. It being remarked that her pupils are unusually large, the mother appeals to her own eyes for proof that this is physiological and hereditary. Her complexion is fair; hair light-yellowish; eyes blue-grey; muscular system well-developed. Her grandmother says that her memory is a little short in sending her a message at times, but nothing beyond what is often observed. Her mother distinctly states that at the beginning of this disease she complained of pain over the left frontal eminence, and she has occasionally had pain in her left hand, but no pain at all is felt at present.

April 14th.—The morbid motor phenomena as observed hitherto have been in the upper and lower limbs of the left side exclusively, and to a slight extent, presently to be indicated, in the tongue. No kind of facial contortion has been observed at any time, and the movements of the eyes appear perfectly natural. There is absolutely no paralysis in the strict sense of the word, unless the deviation of the tongue be interpreted in this sense. With these remarks the description of the actual facts will take the form chiefly of a memorandum of what is witnessed at the present visit.

The child is seated in bed in a natural attitude; she is using the fingers of her right hand in a slightly indeterminate manner in handling the bedclothes, but evidently in such a manner as to show volition with a merely ordinary degree of childish restlessness. Her left hand lies in front of her, partially clenched, and, on its being brought more into view, she opens the fingers of it out with the right hand, after which the abnormal movements characteristic of the disease begin, and are evidently increased when Dr. Gairdner takes hold of the arm above the elbow, and holds it apart from the body. These abnormal movements consist of restless and aimless alternate clenchings and openings out of the hand, not after any strict order of succession, nor yet so as to be completely withdrawn from the influence of the will in detail, but still in such a manner as to give a decidedly abnormal and largely involuntary character to the movements of the left arm and hand as a whole—e.g., the spreading out of the fingers is sometimes extreme, and at other times one or two fingers are separated from the rest, and are rigidly extended when flexion is going on of the others. Then follow rotatory movements of the wrist, and at the same time flexing movements of the hand and fingers, the latter being closely and stiffly bent into the palm, and the whole hand and arm resembling for a moment or two a case of hemiplegic "late rigidity" of Dr. Todd. Then, again, after a short but indefinite interval, there occur movements of extension of the fingers, with renewed rotatory movements of the wrist, all the movements being very extreme of their kind, and at the same time slow, and (as Dr. Gairdner called them in another case) quasi-rhythmic, somewhat like the contractions of involuntary muscular fibre, or the slow successive movements of parts in animals devoid, or all but devoid, of a nervous system. A certain amount of rigidity attends all these movements, whether of flexion or of extension, but it is pretty easily overcome, with the effect usually of setting off the entire series of movements in the opposite direction, as though by touching a spring, or as the contact of an object with the joint of the leafstalk of the mimosa determines movements throughout the leaflets. Moreover, the extreme character of the movements in opposite directions, and their great variety, show that there is no permanent contraction or paralysis; that the essential flexibility of the joints and ligaments is fully maintained, and that the contractility of each separate muscular bundle or group is quite unimpaired. Both arms are well-nourished, and during the abnormal movements the left forearm appears to be preternaturally tense; one would almost pronounce the supinator muscles especially in a state of relative hypertrophy, but on actual circumferential measurement the difference is not such as to imply anything definitely morbid.

When the patient is seated in bed with the legs exposed, there is an obvious tendency to jerk the left great toe out of line upwards, but not on the whole any great amount of abnormal muscular movement. When placed standing on both feet, but without moving forwards, the left hand and arm are more violently rotated in various directions than when she is seated in bed, the arm being very awkwardly and almost ludicrously obtrusive, stuck out behind her like a fin, and with all the fingers spread and the wrist-joint in perpetual movement; all this is still more marked when she walks, and then for the first time it becomes apparent that there is also an awkwardness in lifting and setting down the left foot, which tends to be inverted, as in talipes varus, but not at all in an extreme degree. Beyond this it can only be stated that her walk is "hitching" and peculiar as regards the left limb, but there is no positive instability, and certainly no obvious paralysis. It is invariably observed, however, that the whole action and expression of the child when walking convey a much more complete picture of the disease than when she is seated or at rest, the abnormal movements of the upper extremity being then exaggerated to the uttermost. *Per contra*, it has been observed that whenever she has been watched during sleep, the abnormal movements have been either absent or not characteristic.

As compared with a case of chorea, the movements differ in not being nearly so jerky or instantaneous, and apparently also not so incontrollable at any instant as the

[2] This, and some other circumstances which need not be referred to here, might suggest the possibility of a syphilitic or other hereditary infection; but I can find no ground for suspicion either in the physical characteristics of the girl herself or in the statements of her mother.

choreic irregular movements. At the same time the hand and arm are practically a great deal more useless for any purpose of definite grasping or carrying objects than even in a case of moderately severe chorea. When told to lay hold of an object, she can only do so by waiting for a favourable moment, and working round her hand in various directions until the fingers, semi-automatically, as it were, close upon the object like the tentacles of a sea-anemone. When told to replace the object in Dr. Gairdner's hand, she works round and round again without any definite direction, until at last the fingers unclose and the object is simply dropped. In attempting to lay hold of a coin she most commonly fails, but occasionally succeeds by getting it awkwardly either within reach of all the fingers at once, or between two of them, and then closing the whole hand upon it.

When the trunk is uncovered, the area of these irregular movements is plainly seen to extend to the scapular muscles and serratus magnus, although the abnormal character of the movements in the upper arm and shoulder can scarcely be described with such minuteness and precision as the above.

The tongue has on every occasion on which it has been examined been observed to deviate, when protruded, a little to the left side; but the degree of deviation varies, and while the mode of protrusion is not unnatural on the whole, it appears to Dr. Gairdner that there is a certain degree of irregular movement where protrusion is maintained for some time. There is no deviation of the uvula, and, so far as observed, no difficulty whatever in mastication or deglutition. There is no obvious difference in the sensibility of the two sides, but the child is too young to employ Weber's test so as to obtain certain results. The feet are not very sensitive to tickling, and there are no abnormal excito-motor phenomena. Electric contractility and excitability are normal.

Further observation confirms the remark that her intelligence and emotions do not differ from those of a healthy child of her age, and she is even above the average as to her docility, gentleness, and general conduct in the ward.

May 20th.—Ophthalmoscopic examinations have been made on two occasions by W. Thomas Reid at a month's interval. On the first occasion the reflection from the fundus in both eyes was deeper in tint than natural; the right optic disc rather paler than natural, with tendency to atrophy; the left optic disc had a dirty-grey aspect, and was somewhat atrophied. On the second occasion, to-day, the reflection from the fundus of either eye is as deep as before; both optic nerves pale and slightly engorged; the acuteness of vision up to this time normal.

In the absence of clear indications for treatment, and acting on the analogies, imperfect as they are, with chorea, Dr. Gairdner determined, soon after this girl's admission, to make a trial of considerable doses of chloral hydrate, watching carefully their effect both on the general health and on the spasms. The doses employed hitherto have been from ten to fifteen grains every three hours, except when the effect of the doses appeared to be to produce an inconvenient amount of torpor or somnolence. The remedy was commenced in the minor dose on 21st April, and in about ten days increased as above, but of late again reduced to a fixed number of three doses of fifteen grains each in the twenty-four hours. Although it is not quite easy to formulate, so to speak, the results of this treatment, it may be said with confidence that the patient herself and all her immediate relatives are satisfied of a notable degree of amendment as regards the amount of voluntary control over some of the movements—e. g., opening the hand, flexing the arm, and bringing the closed hand by a well-defined exertion of will into position not quite habitual, as in placing it on the crown of the head. The general health seems quite unaffected.

(To be concluded.)

THE Corporation of Wolverhampton has received the sanction of the Local Government Board to proceed in Parliament this session for powers under the Artisans' Dwellings Act, to remodel the east end of the town. The scheme, which contemplates the demolition of a large area condemned by the medical officer of health, is estimated to cost over £160,000.

ON THE

MYDRIATIC AND OTHER TOPICAL EFFECTS OF THE APPLICATION OF GELSEMINA TO THE HUMAN EYE.

BY JOHN TWEEDY, F.R.C.S. ENG.,

CLINICAL ASSISTANT, ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.

ABOUT eighteen months ago I was asked by Dr. Ringer to complement a series of investigations initiated by Mr. Murrell and himself on the topical action of the alkaloid of gelseminum sempervirens upon the human eye. These gentlemen had already observed the curious fact that while the internal administration of the tincture of gelseminum in doses sufficiently large to produce toxic effects caused contraction of the pupil,[1] the local application of a solution of the hydrochlorate of gelsemina to the conjunctiva was invariably followed by dilatation of the pupil.[2] In one instance which I saw with Dr. Ringer the pupils were contracted to a pin's point, and there was a strong double convergent squint from the internal administration of large and frequent doses of gelseminum, and in several other cases the contraction was well marked.

As the most striking results of the topical application of gelsemina to the eye have already been recorded by Dr. Ringer and Mr. Murrell,[3] I propose to relate some of the more subtle and complicated changes which take place, not only within the eye, but also in the extra-ocular muscles.

It is worthy of remark that whereas the commonly recognised dilators of the pupil are obtained from some member of the natural order Solanaceæ, a powerful mydriatic has now been discovered in gelseminum, which is botanically allied to Strychnos Nux Vomica, and is, indeed, said by many authorities to belong to the same natural order—namely, Loganiaceæ.

My earlier experiments were made with a solution of the hydochlorate of gelsemina, twenty-four grains to the ounce, prepared by Mr. Gerrard, teacher of pharmacy at University College Hospital, while in a few later ones a solution of only four grains to the ounce, prepared by Mr. Martindale, of New Cavendish-street, was used. The following statements refer indiscriminately to the action of either solution, except in instances where the particular preparation is specified. I shall describe in order the changes (*a*) in size of the pupil, (*b*) in the state of the accommodation, and (*c*) in the relative strengths of the extra-ocular muscles.

Pupil.—About ten to fifteen minutes after the application of a drop of gelsemina to the conjunctiva a faint crescent of ciliary injection appears in the sclerotic immediately adjoining the lower and inner margin of the cornea. By degrees the redness becomes deeper in colour, and spreads upwards as well as outwards, until in about twenty minutes more it entirely encircles the cornea. There is, at the same time, considerable engorgement of some of the large straight vessels which course along the sclerotic from back to front, but there is no congestion of the conjunctival vessels, or very little. Simultaneously with the appearance of the ciliary crescent the pupil undergoes slight but appreciable contraction, but almost before the ciliary halo is entire the pupil begins to dilate. Henceforth, the subsidence of the redness and the dilatation of the pupil go on with equal pace, so that by the time that mydriasis is complete almost every trace of ciliary injection has entirely disappeared. From fifty to seventy minutes usually elapse before the pupil is enlarged to its utmost degree, but when it has attained its maximum dilatation it remains fixed and immobile for many hours.

Accommodation.—No sooner does the pupil begin to dilate than evidences of commencing impairment of the power of accommodation for near objects appear, and by the time that full dilatation is reached the normal range of accommodation is shortened by two or three inches, in consequence of the recession of the nearest point of distinct vision. But by attentively "fixing" the near object for thirty

[1] THE LANCET, 1876, vol. ii., p. 73.
[2] THE LANCET, 1876, vol. i., p. 734; also vol. ii., p. 73.
[3] THE LANCET, 1876, vol. i., p. 733; vol. ii., p. 73.

seconds or so, and with a great effort, the near point may still be momentarily approximated about one inch. The further effects on the accommodation depend upon the strength of the solution and upon the number of times that it is employed. If either of the solutions be used once, the power of accommodation for near objects gradually diminishes, and attains its greatest degree in the course of three or four hours; but one application rarely suffices to overcome entirely the accommodation, unless this be naturally weak or impaired by age or debility. Three hours after the instillation of a drop of the stronger solution, the nearest point of distinct vision, originally at, say, three and a half to four inches, is removed to about twelve or fourteen inches; but after the weaker solution it is not further than seven or eight inches. The power of accommodation for near objects can, however, be overcome in the course of three or four hours by repeated applications of the stronger solution at intervals of fifteen minutes to half an hour. The weaker solution must be used more frequently and for a longer time to produce the same effect. If the power of accommodation be great, the weaker solution will not overcome it, and in cases of so-called spasm of accommodation, or in any instance where the power of accommodation is very great and obstinate, gelsemina cannot be relied upon, although the pupil always dilates freely.

Ocular muscles.—If the relative strengths of the internal and external recti muscles be carefully estimated by means of prisms before the employment of gelsemina, it will be found that after the eye is fully under the influence of the alkaloid the internal rectus will overcome a stronger prism and the external rectus a weaker prism than before. This experience was uniform in all the cases in which the strengths of the muscles before and after the application of the gelsemina were tested, although it was not so pronounced when the weaker solution was used. The power gained by the internal rectus seemed to be relatively rather more than that lost by the external. For example, in one carefully observed instance the internal rectus before the instillation of gelsemina could overcome a prism of 18° only with great effort, while the external rectus easily overcame a prism of 6°. Six hours afterwards, when the eye was completely under the influence of gelsemina, the internal rectus could easily overcome a prism of 22°, and the external rectus only one of 3°. In some other cases the difference was very much greater.

There can, I think, be no doubt that gelsemina, locally applied, affects the terminations of the sixth nerve, so that the strength of the external rectus is impaired; but I have been unable to determine whether the internal rectus becomes really stronger or gains power only relatively by the weakness of the antagonistic external rectus. In the experiments performed by Dr. Ringer and Mr. Murrell[4] upon rabbits and cats, in poisoning by gelsemina, whether internally administered or locally applied, the eyeballs became prominent from paralysis of the ocular muscles. This was very marked in the rabbit. Subsequent experiments upon man showed that one of the first symptoms of the toxic effect of the internal administration of gelseminum was weakness, but not actual paralysis, of the external rectus muscle. It would appear, therefore, that gelseminum has a special affinity for the sixth nerve; although, when given in large doses, it profoundly affects also the third nerve. I could not detect any prominence of the globe from the local application of gelsemina in man, nor was the action upon the extra-ocular muscles in any instance great enough to give rise to diplopia.

One of the chief merits of gelsemina as a mydriatic has yet to be described, at least as far as the ophthalmic surgeon is concerned—and it is from this standpoint I have mostly watched the experiments. The importance which is now very properly attached to correction of anomalies of refraction, and especially abnormal regular astigmatism, necessitates the frequent and almost constant use of atropine to overcome the power of the accommodation for near objects. But against atropine there has always been the serious objection that its effects last so long that great inconvenience arises to the patient from being unable to do near work for several days after the error of refraction has been estimated. If the pharmacopœial solution of sulphate of atropine has been employed, at least eight to twelve days must elapse before the accommodation returns to its normal state. With gelsemina, on the other hand, sufficient accommodation returns within ten to fifteen hours to enable a person to read newspaper type at twelve inches, and within thirty hours the accommodation will have practically returned, although the pupil may remain somewhat dilated, though not quite immobile, for several days. I can also state, from personal experience, that the mistiness and confusion of vision when the eye is fully under the influence of gelsemina is nothing like so great as when atropine has been used.

Practically, it may be stated that gelsemina locally applied readily dilates the pupil, and, when used of sufficient strength, temporarily overcomes the accommodation. It is preferable to atropine in cases where the power of accommodation is not great, where it is necessary to overcome the accommodation for a short time only for the purpose of estimating the degree of ametropia, because its effects are more transient, and the confusion of vision during its action is less. To ensure paralysis of accommodation within three hours a solution of at least eight grains to the ounce must be used every fifteen minutes for the first hour, and every half hour afterwards.

Harley-street, W.

[4] THE LANCET, 1876, vol. i., p. 732.

ANÆMIA TREATED BY TRANSFUSION.

A CASE OF FAILURE.

BY FREDERICK TREVES, M.R.C.S.

IN the advance of all medical science, and more especially in the attainment of true principles as to treatment, a record of failures is perhaps as important as records of success. No scientific principle is more trustworthy than that which has been arrived at by a process of elimination of error, and no plan of practice more reliable than that which has been the outcome of constant searchings and of many failures. In a disease like persistent anæmia, where all ordinary methods of treatment do occasionally prove themselves to be of little or no avail, any addition to the physician's store of remedies, or any encroachment on his more usual practice or resource, may be of interest, even if wanting in immediate good. The present case is brought forward as one in which—all other remedies having failed—a mode of treatment somewhat unusual, although in no way novel, was attempted, but without success.

The patient, aged twenty-five, the wife of an agricultural labourer, had always had delicate health, although there was no hereditary taint in her family, the other members being healthy. She had been married four years, and had two children, the younger being six months old. She first came under my notice in the early part of January last. She was then complaining of much debility, was slightly anæmic, and suffering a great deal from dyspepsia, with irregular action of the bowels and frequent attacks of frontal headache. Her tongue was covered with aphthous patches, was a little swollen, and so tender as to render mastication somewhat difficult. She had been suckling her baby, had done as much hard work as she was able, and was most insufficiently fed and attended to. The tincture of perchloride of iron was given, together with stomachics and bitters; the baby was ordered to be weaned, and rest and a more liberal diet urged. The patient, however, totally neglected herself, continued to suckle her infant, made no alteration in her diet, and omitted all treatment. She became rapidly worse, and was at last so weak as to be confined to her bed for the greater portion of the day. This was early in February. She was now extremely anæmic, her face blanched, and her lips almost colourless; she had lost flesh, but to no great extent; her pulse was small and rapid, her breathing at times rather hurried and shallow; there was a distinct systolic bellows-sound over the base of the heart, but no evidence of any organic disease, and her lungs appeared perfectly healthy; her appetite was bad, her tongue tolerably clean, but she was frequently troubled with retching and vomiting; her bowels were irregular, and flatulency complained of; the

menses were absent; there was no epistaxis nor hæmorrhage of any kind. She complained of frequent frontal headache and of great weakness, languor, and depression; there were no enlarged glands to be detected anywhere; the splenic dulness was normal, and there was but a very trifling enlargement or fulness of the thyroid gland (no more than is frequent among young women in this part of Derbyshire), and no œdema of the feet or ankles. She was now well nursed and a liberal diet given her, together with wine and other stimulants. The tincture of perchloride of iron appearing to increase the headache and produce uneasiness in the stomach, the sulphate was given in its stead, in the form of a pill. It was more conveniently borne, but still exercised no effect on the anæmia. Other forms of iron were tried, especially the citrate in various combinations, but with still no impression on the disease. The dyspepsia was relieved by ordinary measures, and quinine and other tonics were prescribed. Food was administered in the most nourishing and concentrated forms, but the patient was able to take it only in the smallest quantities. She became gradually worse, growing daily weaker and more languid, and, if possible, more anæmic. On March 15th her tongue again became swollen and covered with aphthæ, and she was somewhat troubled with vomiting and diarrhœa. These symptoms, however, rapidly abated on the application to the mouth of a wash of hyposulphite of soda and chlorate of potash, and the administration of the former drug internally. The disease rapidly progressed, and on April 3rd the patient was perceptibly dying. When seen on the morning of that day she was semi-conscious, could be aroused only by addressing her in a loud voice; her vision seemed obscured; her extremities were cold; her pulse 80, regular, but extremely small and feeble; her respiration shallow but rhythmical, and the expired breath cool. She had taken no nourishment since the preceding evening; there was no vomiting, no œdema of any part, and the splenic dulness was still in no way increased.

Seeing that the patient would inevitably die if left to herself, I resolved to try transfusion, and on these grounds:—(1) All ordinary remedies had been tried, so far as time would allow, but with no success; (2) apart from the blood disease, there was no organic defect to be detected in any organ of the body; (3) in some cases of severe hæmorrhage, where the anæmic symptoms were even more profound than in the present case, transfusion had been followed by success; (4) cases of idiopathic anæmia have been reported where transfusion was of benefit; (5) considering the somewhat obscure pathology of the disease, there was no knowing what new, and perchance beneficial, action transfused blood might not set up; and, lastly, the patient would die, and that rapidly, if no treatment were adopted.

Dr. W. Webb, F.R.C.S., of Wirksworth, saw the case with me, and agreeing as to the expediency of trying transfusion, very kindly assisted me in the operation, which I carried out in the following manner:—I bled the patient's husband to the extent of ten ounces, the man fainting when that quantity had been obtained. The blood was collected in a vessel kept floating in water at a temperature of 105°, and well defibrinated by whipping with a couple of silver forks, and afterwards by filtering through muslin. By these means the blood retained perfect fluidity throughout. Having no especial apparatus at hand, I used an ordinary brass ear-syringe, capable of holding three ounces, for the operation. The syringe was provided with a long ivory nozzle, which I cut and scraped down until it was the size of the cannula used with Aveling's apparatus, and having cut the point obliquely so as to sharpen it, the instrument proved itself to be very convenient. I then exposed the median cephalic vein in the patient's arm, she being apparently unconscious of the incision. By means of a threaded probe a length of silk suture was passed beneath the vein; and a longitudinal nick having been made in the vessel, the syringe-nozzle was introduced, and the blood very slowly injected. By means of the silk suture beneath the vein, that structure could be well isolated and kept in position; by elevating it on either side the vein could be held tight against the nozzle, and no escape of blood allowed; and when the nozzle had been withdrawn, by a slight elevation of the cord the vessel could be so compressed as to render any regurgitation of blood impossible. The blood was injected in three syringefuls.

The effect of the transfusion was very marked. There was an immediate and considerable improvement in the pulse. From the condition of utter lethargy, the patient awoke to a state almost of excitement; her breathing became quicker and deeper, and her pulse much stronger and fuller. She was perfectly conscious, expressed herself as feeling better, and, above all, warmer, so that she requested that some of the bedclothes should be removed, and attempted to remove them herself. She also expressed a great desire to get out of bed; drank a glass of wine and water when offered her, and her face assumed an aspect much less ghastly. Hot bottles were ordered to be placed to her feet, thighs, and loins; and flannels wrung out in boiling water were frequently applied over the region of the heart, while stimulants were constantly administered. The improved condition was, however, not long maintained. In an hour or so the patient's body again became cooler, her pulse weaker, her respiration very faint, and she sank into the same condition of semi-consciousness. The state of syncope became gradually more and more profound until her death, which occurred at 6 P.M. the same evening, nearly four hours after the transfusion had been performed.

Although the measure was in this instance but of very momentary benefit, still, considering the condition of the patient at the time and the marked effect produced by the operation, it is not beyond the range of probability to presume that transfusion, if practised at an earlier period in the history of this and similar cases, might have been attended with more lasting and material advantage.

Wirksworth, Derby.

A Mirror OF HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

KING'S COLLEGE HOSPITAL.

LARGE SCROTAL HERNIA IN A YOUNG CHILD; OPERATION FOR RADICAL CURE BY WOOD'S METHOD.

(Under the care of Mr. WOOD.)

ON Saturday last Mr. Wood operated on a case of large scrotal hernia, in a child aged three years. The case presented several points of interest. The appended remarks have an additional value, inasmuch as they give the results of Professor Wood's most recent experiences.

The case was congenital, and no truss was of any avail. The abdominal opening was large enough to admit easily two fingers direct, and very lax. The coverings of the sac were thin and delicate. The case required delicate and careful manipulation from the great tendency of the bowel to rush into the sac under the least strain. The rupture could be returned, and kept up most easily by holding up the little patient's legs and pelvis. The fingers of the assistant were then placed over the hernial opening, while the preliminary incisions were being made. The sutures were then placed securely, and the loop of wire tightened up and twisted, with the effect of entirely closing up the hernial aperture. Pressure was then made by a pad and spica bandage, and the child's knees drawn up and held securely together by a roller.

In his remarks after the operation, Mr. Wood stated that he had now operated in more than 200 cases, but few of them were so young as this case, for the reason that it was found difficult to control one so young during the critical period just after the operation. This case, however, was so severe and uncontrollable, and so certain if left in its present state to disable the patient for life, that an exception was made to the above rule. With reference to

the supposed danger of peritonitis, Mr. Wood said that of the three deaths which had occurred in his hands out of the 200 cases, one only was from peritonitis, but even this was found to arise on the opposite side of the abdomen to that operated on, and to have started from a knuckle of bowel which had evidently been in the sac before the operation, and pressed upon by the truss. No inflammation was found in or near the sac operated on. He had found symptoms of peritonitis in not more than 10 out of the whole 200, and then it was usually slight, and confined to the parietal peritoneum. The chief thing was to choose only healthy subjects for the operation, and to be careful to provide a free escape for any discharge which might occur. Usually the after-discharge was very scanty, and consisted chiefly of serum, which crusted the wound. The wire should not be disturbed till a week or ten days had elapsed, and both the doubled ends had ulcerated into the same track or channel. Adhesion and granulation would by this time have matted together and made adherent the enclosed and twisted sac and parietes of the canal. In a severe case the adhesions usually remain for some time delicate and tender, and require support from a well-fitting truss till they are firmly consolidated. In a small and favourable case, however, the sides of the inguinal canal become blended together over and around the spermatic cord, and the natural valvular functions which prevent rupture are restored and maintained. As far as he could follow the numerous cases, he found an average of cures of about 70 per cent. Some had been shown from time to time in the theatre of King's College Hospital after a lapse of eleven, fourteen, and sixteen years; remaining (one under severe tests) perfectly well, and requiring no truss after the first twelve months.

CHARING-CROSS HOSPITAL.

ACUTE ABSCESS OF THE TONGUE (UNILATERAL); RECOVERY; REMARKS.

(Under the care of Mr. BELLAMY.)

SUPPURATION of the tongue in any form is a rare condition, but unilateral suppuration particularly so. It is a disputed question whether the seat of inflammation is in the muscular tissue or in the interfibrillar cellular tissue. It should not be forgotten that the cellular element in the tongue is scanty, and is disposed in very delicate lamellæ, especially towards the middle portion of the organ—the seat of abscess in this instance. The seat of the swelling is somewhat important anatomically in regard to the differential diagnosis of cancer. The case here recorded was, it will be seen, in all probability the result of the introduction of some septic material immediately beneath the mucous membrane, in which the lymphatics form a very free network, terminating in the submaxillary, infra-sterno-mastoid, and pre-thyroid ganglia, which were involved.

The patient was a child aged seven, who presented herself with a very painful unilateral swelling of the right half of the tongue, which was much furred. It was said that the tumour—which was so large as to render protrusion of the organ impossible—came on suddenly; but examination disclosed a small jagged cut on the under surface of the central portion of the tongue. It would almost appear that some particle of decomposed food had been lodged in the wound. The tumour involved the entire dorsum of the one side, being clearly limited by the central line. A plunge of a lancet evacuated a large quantity of pus. It was clearly shown that the abscess was in the proper substance of the tongue, and the limiting effect of the septum upon the diffusion of the pus was well exemplified. The topography of this septum could be easily demonstrated as being strong and thick mesially and posteriorly, gradually becoming thinner towards the tip, where the swelling seemed to involve both sides of the organ. Mr. Bellamy called attention to the fact that the trunk of the ranine artery is liable to lie loose in the sac of a lingual abscess, and would give great trouble if divided; and, moreover, that, owing to congestion, the venous system of the tongue becomes enormously enlarged and the free inosculation increased, consequently severe hæmorrhage may be the result of an ill-directed "slash" into a lingual abscess.

WEST LONDON HOSPITAL.

TWO CASES OF RETENTION OF URINE.

(Under the care of Mr. TEEVAN.)

CASE 1. *Retention of urine following laceration of the urethra from fracture of the pelvis; death seventeen hours after admission.*—Sydney L——, eleven years old, was carried into the hospital at 5.15 P.M. on April 6th, 1877. From notes taken by Mr. Cumming, the house-surgeon, it appeared that the lad had been knocked down by a cart, and that one of the wheels had passed over the lower portion of his pelvis and upper part of right thigh. The patient, when admitted, was in a state of collapse; the right femur was fractured, there was much ecchymosis in the perineum, and blood was oozing from the urethra. The lad soon afterwards wanted to urinate, but was not able to do so. Mr. Cumming tried to introduce a catheter, but, as it would not readily pass, and as he suspected the urethra was injured, he sent for Mr. Teevan, who, when he arrived, at 9 P.M., introduced a No. 6 silver catheter into the urethra, but when it arrived at the bulb it escaped into the cellular tissue between the rectum and urethra. By withdrawing the instrument a little, and keeping its point well lifted up by means of the left forefinger in the rectum, he at last managed to pass the catheter into the bladder and draw off about one pint of clear urine. The instrument was then shortened by four inches, and tied in. The patient's pulse was 140, very small and threadlike, in spite of the stimulants he had had since his admission. The temperature was 96·5°. At 11.30 P.M. he vomited slightly.

April 7th, 7.30 A.M.—Patient has not rallied. Is quite blanched, but does not seem to be in pain. Very little urine has passed. Shortly afterwards a change for the worse came over the lad, and he died at 10 o'clock the same morning.

The autopsy took place six hours after death. The rigor mortis was very slight. The perineum was quite black from ecchymosis, and there were several bruises over the buttocks. When the abdomen was opened a large quantity of blood was found extravasated beneath the peritoneum, commencing in the floor of the pelvis and extending upwards and backwards on either side to the lower end of the kidney. There was no blood in the peritoneal cavity, and none of the viscera were injured. Passing through the roof of the right acetabulum were two fractures running parallel to each other. The ramus of the right ischium was broken through, the upper fragment being displaced and protruded into the rectum. There was also a fracture extending vertically through the horizontal branch of the right pubis, and the spine of the left pubis, which was unusually developed, was knocked off. The floor of the urethra was torn at the bulb.

CASE 2. *Retention of urine from traumatic stricture; internal urethrotomy; good result.*—Thomas E——, a labourer, thirty-five years old, who had formerly served as a soldier in India, was admitted into the hospital on April 20th, 1877, suffering from retention of urine, which was relieved by a No. 6 silver catheter, passed by Mr. Cumming, the house-surgeon. The patient stated that he had had gonorrhœa sixteen years ago, but that he was quickly cured of it, and never experienced any difficulty in micturition till the 20th of January last, when he was kicked in the perineum at Birmingham. He bled profusely from the urethra, and was taken to the General Hospital, where he was under treatment for about a month, and when discharged a No. 11 silver catheter could be easily passed. He did not use any instrument afterwards. Latterly the urine, which had become thick, came in a small stream, and he was frequently troubled to micturate, night and day. The treatment adopted, after his admission, was rest in bed and continuous dilatation; but although the stricture was dilated to No. 18, the patient could only pass No. 16 with difficulty, and there was no corresponding improvement in the stream of urine. As the strictures were so tough and the patient's progress not satisfactory, after twenty-five days' rest and treatment, Mr. Teevan determined to perform internal urethrotomy. On May 15th the patient was put under the influence of ether by Mr. Alderton, and Mr. Teevan divided the strictures from before backwards, one of them being at the bulb and the other an inch in front. No rigor followed the operation, although no quinine

was given, no catheter left in, nor the urine drawn off. On May 19th, No. 20 elastic olivary "bougie à ventre" was passed; on the 21st, No. 25 ditto; and on the 23rd the patient introduced No. 22 with ease for himself, and left the hospital the same day in all respects quite well.

Mr. Teevan remarked that the boy who met with the accident never rallied, and died from the effects of shock and hæmorrhage. In the second case, he had considered internal urethrotomy indicated as the strictures were so tough, and the patient could only pass the catheter with difficulty. He regarded it necessary for the man's comfort and safety that he should be able to pass a large instrument with ease for himself. This he could not do, and taking into account the origin of the strictures, and their condition after a good rest, he did not see much chance of his being able to do so. The operation had not been followed by any rigor, although one took place during continuous dilatation.

SUSSEX COUNTY HOSPITAL, BRIGHTON.

TUMOUR OF THE MITRAL VALVE; ABSENCE OF PHYSICAL SIGNS.

(Under the care of Dr. KEBBELL.)

A SHORT time ago a middle-aged man was admitted into this hospital with symptoms of head mischief of which he soon died. Examination after death disclosed not only all the evidences of meningitis of the base of the brain, but also a remarkable tumour on the mitral valve, which during life had not given rise to any abnormal cardiac sounds whatever. The specimen was recently exhibited by Dr. Kebbell at the Brighton Medico-Chirurgical Society, and the following remarks made thereon:—

The tumour was of a firm, fibroid character, about the size of an ordinary hazel-nut, irregular on the surface, and situated on the auricular surface of the valve. The valve to which the tumour was attached showed otherwise no signs of disease; in fact, the heart in all other respects seemed quite healthy. Dr. Kebbell remarked that, although valvular tumours are not very uncommon, he did not remember ever having seen one at all similar to this. The specimen was interesting, not so much on account of its rarity as on account of the entire absence of any abnormal cardiac sounds during life. If the specimen were shown to any stethoscopist he might very reasonably say that during life there was a diastolic murmur at the apex of the heart, that the blood in passing from the auricle into the ventricle impinged upon this tumour, and caused a murmur. But such was not the case. The patient was seen and carefully examined daily by Dr. Hollis, and several other medical men up to the period of his death, but no murmur or any symptom of heart disease was ever detected. The patient was a man of middle age, of a dissipated character, and admitted into the hospital for symptoms of head mischief.

Dr. Kebbell suggested that the absence of a murmur in this case may probably be accounted for by the fact that, though the tumour was of a considerable size, the valve was otherwise healthy, and its regular working was not interfered with. There was no regurgitation, nor any material narrowing of the orifice; and it is difficult to understand how the mere impinging of the current of blood through the orifice could produce any sound.

EDINBURGH ROYAL INFIRMARY.

CASES OF AMENORRHŒA FROM ABSENCE OR ATROPHY OF INTERNAL GENITAL ORGANS.

(Under the care of Dr. J. MATTHEWS DUNCAN.)

THE report of the following cases has been supplied by Mr. Massiah.

Emansio mensium.—F. W——, aged twenty-six, single, short, dark, sallow, apparently well formed and healthy, complained of amenorrhœa dating six months. On examination, the mammæ were found to be of full size, with small areolæ and large nipples. The external genital organs were small and abundantly covered with hair. The genital fissure measured vertically two inches from the fourchette to the clitoris, and three inches to the junction of the labia majora; these latter were flat, the nymphæ and clitoris small, but otherwise all were natural. On separating the labia a large hymen appeared, its sides touching each other and projecting forwards; these hymeneal folds were pale, with crenated edges, thickish at their bases, and extending to the urethral orifice, which was surrounded by a rim of the same pale crenated tissue. The urethral orifice was natural. Among the hymeneal folds there was no opening. Beneath the hymen was a cul-de-sac an inch deep, measured from the fourchette. Per rectum, no trace of internal generative organs was detected: a catheter in the bladder was felt with apparently no interval between it and the gut but a thin recto-vesical septum. The bladder, when sounded, seemed to fill the pelvis and reach to the promontory. The anus was natural.—Pelvimetry: Crest of the ilium, 13 in.; spines of the ilium, 8¼ in.; external antero-posterior diameter, 6¼ in.

This patient's history was not reliable; at one time she stated that she had two children, at another that she had never had connexion. She asserted that menstruation occurred once when she was fifteen years and a half of age, and that an operation was performed on her in Germany when nineteen years old, since which she had menstruated profusely every fortnight until six months before admission. She lives by imposture, and has been admitted into hospitals as a distressed governess, spitting blood.

Emansio mensium.—C. R——, aged twenty-one, single, fair, of meagre and unhealthy appearance, said she had a red discharge for two days when eleven years old, but had seen nothing since. For four months past she had had a dragging pain over the base of the sacrum, sometimes extending to the right side. This pain was more severe every four weeks, at which time she had fetid breath and ozæna. Her habits were intemperate.

On examination the vulva was small, there was a scanty growth of hair on both labia, but scarcely any on the mons veneris; these parts were small and flat. The vagina was without hymeneal obstruction, short, and constricted near the cervix, which was small, with short lips and minute os. The uterus measured an inch and a half in length. There was congenital contraction of the palpebral fissure, so that she could only see by turning her eyes down and contracting her occipito-frontalis; the eyelashes were absent, and the eyebrows almost so.

Premature senescence. — L. D——, aged twenty-three, married, well-made, good-looking, and seemingly very healthy, began to menstruate when from twelve to thirteen years old, and continued to do so four days monthly until she became pregnant at the age of nineteen years and a quarter. During the six months of pregnancy she lost sexual desire, and coitus became painful—a state of matters which afterwards continued except for a month, about a year after her confinement, when she regained pleasure, menstruated, and became pregnant. This was the only menstrual period that occurred between her pregnancies, and she did not menstruate after the birth of her second and last child a year ago. She was suckling when seen. The vagina was of large size, the posterior cul-de-sac tender when touched, the cervix short and atrophied (like that of an old woman), the os small and closed. The uterus measured two inches and a quarter in length.

In two other women, aged twenty-nine and forty respectively, menstruation ceased at the age of twenty-six; in one after the birth of an only child, and in the other after two children had been born. In each case the intra-vaginal portion of the cervix had atrophied, and the os and uterus were small. In the woman that had had two children the uterus measured two inches, and here an attack of menorrhagia, lasting eight days, was said to have occurred four years after the second confinement.

Dr. Matthews Duncan did not regard the latter cases as hopeless, for he had known return of sexual desire and of fertility after their complete temporary disappearance; but generally such cases underwent no change for the better. He knew of no treatment suitable except such emmenagogue remedies (so-called) as were good for the general health, which should be promoted in every way.

Treatment by intra-uterine bougies of various kinds had been much and highly spoken of. They might be tried; but he had seen decided evil from them, and he could not say he had seen decided good.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE last meeting of this Society for the session was held on Tuesday, May 22nd, Dr. West, the President, in the chair. Owing to the fact that three papers of some length were read, there was but little time for the discussion which their importance merited.

An elaborate paper, of which the following is a brief abstract, "On the Clinical Condition of the Heart and Vessels in Chlorosis," by Dr. PEARSON IRVINE, was read. The author remarked that certain cardiac physical signs have been long associated with chlorosis and allied conditions, and, above all, a "hæmic" murmur at the base, by some said to be generated in the aorta, by others in the pulmonary artery. It is rare to find in text-books mention of any other of the cardiac signs met with in the above diseases. The most important change in the circulatory system is dilatation of the ventricles of the heart, especially, perhaps, of the left. This is hardly noticed by writers in this country. In Germany, Stark (*Archiv der Heilkunde*, 1863) insisted on its occurrence in severe cases, but it is common to find it in those of moderate degree. Besides physical signs subjective symptoms favoured this opinion, such as frequent palpitation, dyspnœa, cough, and the state of the pulse, as do also the results of treatment in its direction. The physical signs are often almost conclusive. The apex-beat in chlorotics is carried too far outwards, is too diffuse, and, in this respect, corresponds with the general cardiac impulse, which is usually "slapping," and, like that met with in organic disease, followed by dilatation. Sometimes the impulse is distinctly heaving, and hypertrophy undoubtedly occasionally occurs. Virchow and others have maintained that this is the usual condition in chlorosis, and have ascribed it to narrowing of vessels. Perhaps, however, when it occurs, it is simply secondary in most cases to anæmic dilatation. The cardiac murmurs heard in chlorosis are various, and exclusiveness should not be claimed for one or the other. They may be heard in one or several of the following positions, all being systolic in rhythm, yet separable from one another when two or more coexist:—(1) over the aorta; (2) over the pulmonary artery; (3) over the left auricle and its appendix; (4) at the left apex; (5) over the fourth left costal cartilage, limited there or transmitted downwards to the right or left; (6) in the fifth left space, below it, or over the sternum adjacent to the parts. Thus murmurs may be heard "all over" the cardiac area, and yet it may be possible to localise them. The effects of pressure in intensifying murmurs in the area of the pulmonary artery are almost conclusive of their generation within it. Frequency of aortic murmurs is more doubtful, but their occurrence has been asserted by many eminent physicians. At the apex a bruit will often be found if looked for, and in its case the question arises whether or not it is due to mitral regurgitation. It can be explained on better grounds than supposition of the latter. Over the auricular appendix a murmur is certainly sometimes heard, as Naunyn says, who believes it to be due to the eddying of thin regurgitated blood in the auricular appendix. Dr. Balfour supports this theory, and by its supporters almost complete exclusiveness is claimed. Perhaps this murmur has been confounded with bruits generated in arteries about the clavicle, and with those whose greatest intensity is over the fourth cartilage. Dr. Balfour asserts that this auricular murmur is heard in all cases where the venous hum in the neck is decided. This is certainly not the case; the murmur audible over the fourth cartilage or below it, or in parts adjacent, is of great importance; it is as common as any abnormal sound heard in chlorotics. Quite ten years ago Parrot, of Paris, described a murmur in the area mentioned, as met with in acute anæmia from hæmorrhage, and associated with evidences of tricuspid regurgitation in the veins of the neck. He has since argued that all the murmurs heard in chlorosis are due to tricuspid regurgitation. But this exclusive view is altogether arbitrary. The fourth cartilage murmur is sometimes transmitted downwards, to the apex, or towards the ensiform cartilage. A consideration of hæmic murmurs is likely to aid in explaining many so-called organic ones. In chlorosis the murmurs heard at the fourth cartilage and below it are, perhaps, due to dilatation of the ventricles, to their consequent imperfect emptying, and the eddying of thin residual blood in them. Sir Dominic Corrigan long ago gave this explanation of some apex murmurs in mitral disease, and it has been renewed by later writers. In chlorotics a murmur thus generated is possibly sometimes best heard at the apex, but oftener over the fourth cartilage or adjacent, because the stethoscope is then immediately applied over the source of the murmur. There are many other explanations, plausible enough, of these murmurs, such as irregular vibration of valves, irregular action of the musculi papillares, and in rare cases actual incompetency of the mitral or tricuspid orifice secondary to ventricular dilatation. The pulse in chlorosis is not always rapid, as is everywhere advanced; it is very often, indeed, slow and suggestive of a state of hibernation, though easily excited into rapidity. It is often irregular from moment to moment, both as regards fulness and frequency, and thus such as one would expect in anæmic dilatation of the ventricles. The excitement of examination makes the pulse irregular in this way, but sometimes produces no change whatever in it. Venous murmurs are certainly best heard in the right neck, and in most cases are audible on this side only. The effects of respiration on the bruit du diable are much disputed, but the statement of Hope, that respiration causes the "humming" to become "rushing," is probably correct. Inspiration favours the return of blood from the veins, and thus brings this about. Curious changes in the venous hum may be made by modifying respiration. Clinical observation of the heart in chlorosis and allied anæmic conditions is of therapeutical importance. To meet the cardiac states mentioned, belladonna seems most suitable, its use being indicated by its known physiological effects, by its action in cases of fever, as asserted by Graves, and by the condition of the heart. It makes the pulse regular in force and rhythm, and increases the number of beats. Of course iron is the essential remedy, but many cases improved much more rapidly generally, while various troublesome symptoms at once disappeared, when belladonna was added to the prescription, doses from about eight to ten minims being employed.—Dr. BARNES referred to the necessity for more accurate and extensive observation on the subjects referred to by Dr. Irvine, and especially as to whether the symptoms of chlorosis are due to changes in the blood or the tissues, especially in the heart itself. He differed from the author in his views, and thought that the observations on which those views were grounded were insufficient to support them. It seemed to him more probable that the dilatation of the heart was due to the altered condition of the blood, as seems to be the case in pregnancy, where there is also altered blood condition and hypertrophy of the heart. Probably the deterioration in the quality of the blood stimulated the heart to excessive exertion to make up for the deficiency. Perhaps also some part of the increased area of cardiac dulness might be due to the want of tonicity of its muscular fibre; the weak, watery, and flabby condition giving the appearance of real dilatation. Moreover, the perfect recovery in many cases showed that there was not likely to be any real organic disease of the heart. The changes which occurred in chlorosis might be likened to those occurring in the blood in pregnancy, which sometimes give rise to simulated organic disease, such as the albuminuria of pregnancy, which (although even casts might be found in the urine in primiparæ) was probably not really organic.—Dr. BARCLAY observed that all murmurs were in reality hæmic—i.e., produced from altered relation between the blood and the cavities and orifices of the heart. Such murmurs as occur in chlorosis were, he thought, probably due to changes in the blood, owing to which it vibrated more readily. In such cases the murmurs might be equally audible all over the heart, but were usually best heard at the apex, owing to that being the most superficial part in

many cases. The murmurs heard in the neck were arterial or venous according to the way in which the stethoscope was held.—Dr. IRVINE, in reply, said that he agreed with Dr. Barnes that the first changes were probably in the blood, and those in the heart secondary, as shown by the entire disappearance of the symptoms under treatment. He admitted, with Dr. Barclay, that all murmurs were "hæmic" in the sense of being produced by altered relations of the blood and heart. As to the murmurs in the neck, it had been pointed out that arterial murmurs were increased by pressure over the vessels by the stethoscope, venous murmurs diminished.—Dr. WEST observed that so far as his observation went, the murmurs heard in children were far more commonly organic than not, and that hæmic murmurs were in them of much less frequent occurrence.

A paper, by Mr. WILLIAM ADAMS, "On Contraction of the Fingers (Dupuytren's Contraction), and its Treatment by Subcutaneous Division of the Palmar Fascia and immediate Extension," was read. The author directed attention to one form only of finger contraction—namely, that which has been proved by Dupuytren to depend upon contraction of the palmar fascia, and not involving the tendons or sheaths of the tendons, as generally supposed. After quoting the account of Dupuytren's dissections, the author referred to another dissection by Goyrand, which confirmed the account given by Dupuytren; and also to Mr. Partridge's specimen in King's College Museum; and to a severe case of contracted fingers under his own observation, in which the hand was torn open by a horse. In all these instances, the contraction was shown to depend upon the fascia alone, which passed across like the string of a bow, whilst the tendons in their sheaths were seen lying at a distance along the concavity of the curve. The greater the contraction, the greater the distance between the fascia and the flexor tendons. With regard to the cause, the author considered that it depended entirely upon constitutional causes, and not upon any local cause, such as the use of tools in various occupations, &c. The author believed it to be essentially of gouty origin, though occurring generally where there is a tendency to rheumatic gout, rather than true inflammatory gout. With regard to treatment, the author reviewed the operations by open wound, as practised by Dupuytren, Goyrand, and more recently by Professor Busch, of Bonn, whose results are reported by Dr. Madelung; after which he referred to the subcutaneous method of operating, which has not been generally regarded with much favour. The author condemned all the operations by open wound on account of their severity, risk of suppuration, and tedious healing. He then fully described the details of the subcutaneous method of operating, with some improvements, and also the method of after-treatment which he had adopted of late years. These consisted—1st. In the subcutaneous division of all the contracted bands of the palmar fascia, and its digital prolongations, that can be felt by as many punctures as might be necessary, the smallest tenotomy knife being passed under the skin, and cutting from above downwards. 2nd. Immediate extension of the contracted fingers, the fingers and hand to be bandaged to a splint. 3rd. The bandage not to be removed until the fourth day, when the punctures will be found to be healed. 4th. Extension splint to be worn night and day for two or three weeks, and afterwards at night for three or four weeks, motion being employed every day. The author believed relapse of the deformity was guarded against by this method of multiple subcutaneous divisions of the fascia and immediate extension.—Mr. GASKOIN referred to the contractions of the finger in leprosy as having some analogy with that under consideration, and expressed an opinion that contractions of the palmar fascia were more common in the middle classes than amongst the class of hospital patients.—Mr. Adams exhibited, at the President's request, casts and photographs illustrative of the condition.

A case of Primary Cylindrical Epithelioma of the Lung, reported by Dr. DAVID FINLAY and Mr. ROBERT W. PARKER, was then read. The authors stated that the case was interesting rather from a pathological than from a clinical point of view. Clinically the features differed little from an ordinary case of cancer of the lungs. H. P——, a ship's carpenter, aged thirty-seven, was admitted into the Royal Hospital for Diseases of the Chest on February 8th, 1877. His illness dated six months back, previous to which time he had always been perfectly healthy. His first symptoms were cough, with shortness of breath, and pain in the left infra-axillary region, which was aggravated by deep inspiration. When first seen he was observed to lie on his back or right side, and was unable, in fact, to lie on the left side. His expression was anxious; his face dusky; his lips livid; alæ nasi dilating with each inspiration; external jugular veins prominent and distended; fingers somewhat clubbed. There was absolute dulness on percussion over the lower two-thirds of the left back. Over this dull area the breathing was feeble, accompanied by sonorous râles and diminished vocal vibration. In short, the physical signs were those of a limited collection of fluid within the chest, with thickened pleura. In view of this, exploratory punctures were made, but with no satisfactory result. The patient died a month after admission. At the autopsy both lungs were found studded with a large number of nodules of a soft spongy nature, of varying size. The pleura also contained a few independent nodules; some of the bronchial glands were affected, and there were three nodules of the same character in the liver. The other organs were healthy. The microscopic examination showed that this new growth consisted of epithelium, for the most part arranged in cylinders. The cylindrical arrangement of the epithelium was most marked in the lung. It was found lining spaces which corresponded in size and general appearance with the alveoli of the lung. The walls of the alveoli, beyond some inflammatory thickening, did not seem to participate at all in the cancerous deposit. In no part of the lung did the cancer affect the parenchymatous structure. In some instances the alveoli were larger than normal, but this was obviously due to the fact that two or more alveoli had coalesced. The examination of the pleura showed a similar arrangement, but as a rule the cylindrical arrangement of the epithelial cells was less regular and less typical. The bronchial glands presented appearances similar to those found in the pleura. The liver growths were also less typical than those in the lung. The authors regarded the case as one of primary cancer of the lung from the fact that the symptoms pointed to an affection of the lungs *ab initio*, and they believe that this opinion is borne out by the microscopic examination of the new growths, which showed a more perfect type of structure as well as a more typical arrangement of all elements in the lung than elsewhere, and, further, the amount of cancer found in the lungs was very much greater in point of quantity than that found in all the rest of the organs put together.

The PRESIDENT, in congratulating the Society upon the papers read, expressed a hope that more papers would be sent in next year at the beginning of the session, when there was often a dearth of papers, and plenty of time for their discussion.

The Society then adjourned.

PATHOLOGICAL SOCIETY OF LONDON.

THE last ordinary meeting of this Society for the session was held on the 15th ult., Dr. Murchison, President, occupying the chair. A very large number of specimens were exhibited, the most notable being specimens presenting the minute changes in the spinal cord in hydrophobia, shown by Dr. Gowers; and a specimen of pericardial omental hernia, probably traumatic, shown by Mr. Morrant Baker.

At the commencement of the proceedings the President announced that the Council had nominated the following gentlemen to serve on a committee to investigate the condition of the bloodvessels in chronic Bright's disease—viz., Drs. Sanderson, Bristowe, Gowers, Cranstoun Charles, and Mr. E. A. Schäfer.

Dr. CAYLEY read the report of the Morbid Growths Committee (on behalf of himself and Dr. Bristowe) upon Dr. Coupland's specimen of Lymphoma of the Prostate. The committee agreed with the author's description, but stated their inability to detect nuclei at the nodal points of the reticulum of the growth.

A note upon "Leprous Nerve-disease," communicated by

Dr. VANDYKE CARTER, was read by the Secretary. Dr. Carter avers that the nerve-changes are the most constant feature in leprosy, involving both the superficial and deep nerves. Altered swollen cutaneous nerves could be traced to leprous spots or ulcerating nodules. Certain ovoidal granular dark-green bodies which were met with in the affected skin occurred also in the sheaths of the nerves.—The PRESIDENT said that the Society was indebted to Dr. Carter for his communication, in which he arrived at conclusions similar to those propounded by Virchow. He (Dr. Murchison) was not, however, aware that Virchow had described the coloured granules upon which Dr. Carter laid stress.

Mr. NUNN exhibited specimens and drawings of Sections of the Spinal Cord in the Cervical Region, and of the Phrenic Nerves, illustrating Prof. Charcot's views as to the changes in the cord and phrenic nerves in progressive muscular atrophy dependent on spinal causes:—1. Showing the anterior "zone radiculaire" sclerosed, and the "filets radiculaires antérieures" atrophied, the sclerosis being consecutive to alteration in the anterior cornua of the grey matter of the spinal cord, the "cordons de Türck," the "cordons latéraux" and the "cordons postérieurs" being normal; the anterior cornu being changed by the disappearance of the special nerve-cells and by the exaggerated development of the vascular plexus. 2. Whilst the anterior cornu had undergone profound changes by the disappearance of the special nerve-cells the "cordons de Türck" and the "cordons latéraux" were sclerosed, the "zone radiculaire antérieure" and the "cordon postérieur" being normal. The sections of the phrenic nerves treated with osmic acid showed the shrinking of the nerve tubules, and the excess of the connective tissue. Dr. Charcot divides chronic muscular atrophy into two classes—(1) amyotrophie protopathique; (2) amyotrophie deuteropathique. In the first the pathological change takes place primarily in the anterior cornua of the grey matter; in the second, in the antero-lateral columns of the cord. The detailed description of the symptoms and characters of the two affections "amyotrophie protopathique" and "amyotrophie deuteropathique" are fully set out in the "Archives de Physiologie," 1875, No. 5; and in the "Leçons sur les Maladies du Système Nerveux," vol. ii., 3ème livraison.

Mr. WARRINGTON HAWARD showed a specimen of Cystic Disease of the Testicle, which he thought threw some light upon the origin of such cysts. The patient, thirty years of age, contracted syphilis six years before his admission into St. George's Hospital, and two years before his admission the testis and inguinal glands of the left side began to enlarge. He was admitted under the care of Mr. Pollock, in July, 1875; the affected testis was of the size of a lemon, and there were enlarged glands in both groins. At first treated for syphilis, the malignant nature of the disease soon became manifest, and the man sank in January of the present year. The pelvic and lumbar glands were enlarged, and secondary growths occurred in the lungs. The right testis was natural, but the left was oval, firm, slightly uneven, and studded with cysts varying in size from a pin's head to a pea, their walls being opaque and pearly, or transparent. The intercystic material was composed of dense fibrous tissue, and in some parts were nodules of cartilage, in other parts large epithelioid cells. The cysts were evidently formed by dilatation of portions of the gland-tubules.

Mr. MORRANT BAKER exhibited a female patient, fifty years of age, the subject of Morphœa. The disease, which Mr. Baker described as a peculiar form of localised scleroderma, began on the forehead and scalp six years ago.

Dr. D. B. LEES showed an infant nine months old, who presented in a marked degree a cutaneous eruption produced by bromide of potassium. The case had been diagnosed from its similarity to another that had been recently seen by Dr. Barlow and himself. The child had suffered from convulsions about a month before, and had been prescribed as much as five and a half grains every three hours. The bromide was continued for a fortnight, and four days after its administration had been given up there appeared an eruption like acne, which speedily formed areas of a dull red tint, studded with fine yellowish points. These areas in places coalesced, and finally became covered with a crust. Where the surface had been subjected to much friction it was papillary.—The PRESIDENT remarked upon the various degrees of susceptibility to the drug; he had lately seen a patient who was taking 120 grains of the bromide daily without any eruption.—Mr. MORRANT BAKER suggested that the early age of Dr. Lees' patient probably rendered it more susceptible.—Dr. POWELL asked if the late appearance of the rash after the drug had been discontinued could be explained. As a rule bromide of potassium is rapidly eliminated.—Dr. MAHOMED related a case of a similar acniform eruption clearly traceable to the use of iodide of potassium; the rash appeared whenever the drug was administered, and faded whenever it was discontinued. In this case the rash became pupial. The patient died from renal disease.—Dr. BARLOW agreed with Mr. Baker as to the susceptibility of very young children to the influence of the drug. In the case of an infant six months old the eruption appeared after three days' administration of bromide of ammonium in doses of six grains daily. He could not explain the fact alluded to by Dr. Powell, but he had observed in other cases the retardation of symptoms after administration of the drug. One case was that of a girl with laryngismus, who, before her admission into hospital, had been taking bromide of ammonium; and it was not until a few days after her admission that the rash developed. This rash also was villous and papillated in the flexures of the neck; and it persisted for several weeks.—Dr. THEODORE WILLIAMS referred to a case reported by Dr. Cholmeley in an early volume of the Clinical Society's Transactions.

Dr. GRIFFITHS (of Swansea) showed a specimen of Cirrhosis of the Liver, which was of interest mainly on account of the displacement which the organ underwent during life, so as to simulate a somewhat rapid enlargement. The patient was fifty years of age, and was first seen by Dr. Griffiths in January, 1875. He then showed symptoms of mitral regurgitation, and a diminished area of liver dulness. In July, 1876, the apparent size of the liver was still very small; but in November it seemed to have undergone rapid enlargement, for its lower margin then reached to the iliac crest, and, above, the dulness reached to within two fingers' breadth of the nipple. The question of the existence of malignant disease superadded to the cirrhosis was raised; but when the patient died it was found that the liver, which was markedly cirrhotic and shrunken, had undergone a rotation on its horizontal axis, so that its upper surface became foremost. This change in position was probably due to the occurrence of emaciation and muscular atrophy in a previously well-nourished abdominal wall.

Mr. NETTLESHIP showed, for Mr. Spencer Watson, a specimen of Melanotic Sarcoma of the Choroid. The growth had been detected by the ophthalmoscope, and the eyeball removed. Although fifteen months had elapsed since the operation, there had been no recurrence.

Mr. BUTLIN exhibited a specimen of Chondroma of the Submaxillary Gland, removed by Mr. Savory from a girl fifteen years of age. The tumour had been growing for about four years, and at the time of removal formed a large, prominent, hard mass beneath the lower jaw. It was encapsuled, and was composed of cartilage, bundles of fibrous tissue, and relics of normal gland structure. It resembled the more usual parotid chondromata. Although Virchow speaks of chondromata in the salivary glands as not being common except in the parotid and submaxillary, yet Mr. Butlin had only been able to find four cases on record in which the latter gland was affected. These growths are less common in the sublingual gland and in the lachrymal.—Mr. RUSHTON PARKER (of Liverpool) said that he had found remains of the normal acini in a parotid enchondroma, and he also mentioned that he was recently present at the removal of a small cartilaginous tumour from the submaxillary region. The submaxillary gland could, however, be separated from the growth, which it was supposed had originated in the parotid. As to the origin of these growths, he thought some might be due to fœtal displacement of the cartilage of Meckel. Others arose in the connective tissue of the gland, and histologically there was a gradual transition between well-formed fibrous tissue, mucous tissue, and cartilage to be found in these tumours. He thought himself that they probably invariably arose in the connective framework of the gland.—Mr. ALBAN DORAN did not think it possible that these tumours arose from Meckel's cartilage, which was of mesoblastic origin, and which disappeared as the lower jaw was developed. If they had such an origin they should appear earlier in life than was the rule.—Mr. BUTLIN concurred in what had fallen

from Mr. Doran. There was no particular reason for supposing that Meckel's cartilage could become displaced.

Mr. MORRANT BAKER showed a remarkable specimen of Pericardial Omental Hernia. The specimen was removed from a man fifty years of age, who died from pyelo-nephritis secondary to stricture. During the ten days he was in the hospital, his chest was carefully examined, but the conditions found after death were not suspected. On laying open the pericardial sac, the surface and sides of the heart were seen to be surrounded by a large piece of omentum, which passed through the diaphragm by an aperture large enough to admit the tip of the little finger. The pericardium was not thickened and not adherent to the surface of the heart. The omentum was adherent to the edge of the opening in the diaphragm. In seeking for a possible explanation of these appearances, Mr. Baker found a linear transverse scar two inches below the left nipple, and corresponding with it a thinning of the intercostal space, and at the upper part a portion of the fifth rib had been cut off. There was marked spinal disease, the last dorsal vertebra having disappeared. Very little information could be gleaned as to the patient's previous history. He was known to have travelled much, and at one time to have been a Canadian volunteer, but there was no clue as to the date at which he received the wound in the chest. Mr. Baker believed the wound to have originally passed through the pericardium, and to have given rise to the hernia, the theory of congenital malformation of the pericardium being unsupported by any collateral evidence. Dr. John Reid, in writing on diaphragmatic hernia, relates a case in which this was produced by a stab inflicted fifteen years before death. The hernia was omental, and into the left pleura. It was curious that so much omentum should have passed through so small an aperture, but Mr. Baker pointed out that the gradual passage of the hernia through the aperture into the pericardium was doubtless aided by the intra-thoracic "negative pressure"; a force aided also by the intra-pericardial diminution in pressure at every systole. He concluded then that the specimen was an instance of pericardial hernia of traumatic origin; that its large size was due to the pressure exerted by the abdominal walls, especially in the straining necessitated by the urethral stricture; that this was aided by a constant "negative pressure" in the pericardium, increased by inspiration and the cardiac systole.—Mr. WAGSTAFFE thought the explanation borne out by what is seen in cases of hernia of the lung.

Dr. GOWERS showed an extensive series of microscopical sections exhibiting the Changes in the Medulla Oblongata and Spinal Cord in four cases of Hydrophobia. For two of these, which occurred at Sheffield and Hertford respectively, he was indebted to Dr. Lockhart Clarke, and for the opportunity of examining the other two, from cases at St. Bartholomew's Hospital, to Dr. Wickham Legg. The changes found resembled in the main those which have been described by Benedikt as occurring in the convolutions in the dog, and by Dr. J. Coats in the lower centres in man. In all four cases the vessels of the grey matter were greatly distended, the distension being greatest in the medulla near the grey nuclei in the lowest part of the fourth ventricle. In three of the cases the larger veins in this position presented aggregations of small cells within the perivascular lymphatic sheath. These were in some cases as a single layer, in other cases densely packed so as to compress the vessel they surrounded. In a few places these cells extended beyond the limits of the sheath. In most parts similar cells were scattered through the tissue among the nerve elements, and in some places, chiefly in and near the hypoglossal nuclei, there were dense collections of these cells, constituting, in fact, "miliary abscesses." Similar smaller collections were seen among the fibres of origin of the hypoglossal and glosso-pharyngeal nerves. Adjacent to many vessels were areas of granular degeneration. In two of the cases many of the larger vessels, chiefly veins, contained clots, parts of which were evidently of ante-mortem formation, portions of the clot being different from the rest, darker, granular or spongy in aspect. By some of these the appearance of embolism was closely simulated. Attention was drawn to the indications of formation *in situ* afforded by the gradation between the normal and the altered clot, and by the curved lines of pressure to which the clot had been exposed immediately after its formation. One specimen presented thickening of the inner coat of a vein opposite the older part of a clot, and the clot was reduced in size correspondingly, as if formed secondarily to the change in the inner coat of the vein. In this vessel there were round cells in the perivascular sheath, and leucocytes within accumulated in the old clot, and within the substance of the swollen inner coat, affording strong evidence that the cells outside were also migrated corpuscles. The nerve-cells presented comparatively slight changes, being merely slightly swollen, and granular in some places, and surrounded with granular degeneration here and there. These changes were most intense in and about the hypoglossal, pneumogastric, and glosso-pharyngeal nuclei, slighter in the nuclei of the auditory, facial, and fifth nerves, slighter also in the cord, and still slighter in the upper part of the pons. Dr. Clifford Allbutt had also found less definite changes most distinct in the medulla. In Dr. Gowers' cases the change reached its maximum in the region of the "respiratory centre" in the medulla, which includes that prolongation downwards of the facial nucleus which subserves the movement of the lips. The paroxysms of spasm of hydrophobia are paroxysms of respiratory spasm. In the case in which the change in the respiratory centre was most intense, the paroxysms consisted of spasm of the diaphragm, and an inspiratory effort in which the clavicles almost touched the lower jaw, and the lips were pressed against the teeth. Further evidence of the over-action of the hypoglossal nucleus, in which the changes were so marked, was afforded by one case, in which a noise as of the tongue being smacked against the roof of the mouth occurred at the commencement of each spasm. Dr. Gowers concluded by alluding to the difficult question of whether these vascular changes are the initial lesion in the nerve-centres, or are secondary to the irritation of the nerve-elements by the blood-poison. It was certain that embolism played no part in the process. The coagulation in vessels was also not essential; while in one case the absence of cell-infiltration showed that dilatation might be the only morbid state of the vessels. On the other hand, the changes in some of the clots, in cases in which the symptoms lasted only three days, showed that considerable vascular changes must have occurred very early in the disease.—Dr. CRISP asked whether his researches had led Dr. Gowers to believe that there was any special lesion characteristic of hydrophobia?—Dr. GOWERS replied in the negative.

Dr. F. TAYLOR exhibited a specimen of Lymphoma of the Intestine from a child six years of age. The symptoms, which were those of emaciation, slight diarrhœa, and enlargement of the abdomen, were of about six months' duration. A tumour was found connected with the mesentery and a portion of the ileum, which entered the tumour at its lower part. The wall of the ileum was much thickened by the growth, and the calibre of the gut much increased, so that it measured eight inches across. The growth was lymphomatous. There were no secondary growths. It illustrated the fact pointed out by Dr. Moxon, that tumours involving the wall of the intestine led frequently to dilatation rather than obstruction. In the 25th volume of the Transactions, Mr. Arnott describes a case of invasion of the colon by a growth in the omentum, causing thickening and ulceration of the colon.

Dr. LYELL showed a specimen of Myxo-Sarcoma of the Thigh. The tumour was removed by Mr. Nunn from the thigh of a man who had had it for two years. At first the tumour, which lay over the femoral vessels, simulated an aneurism, but as it increased in size its true nature became manifest. Its removal was difficult, owing to the great friability of the growth, and to its blending with the sheath of the femoral vessels. It was thus not wholly extirpated, and there is now considerable recurrence in the site. The tumour, on removal, weighed 3lb. 11oz., and had the characteristic gelatinous appearance of myxoma. It was found to be a round-celled sarcoma in all stages of mucous degeneration. Dr. Lyell remarked upon the great size of the growth, and its probable origin from the femoral sheath.

Dr. GOODHART showed a specimen of Ostitis of the lower end of the Diaphysis of the Humerus, from an infant sixteen weeks old. The child had a diffused, coppery, macular rash over the face and trunk, a large spleen, and pneumonia. It died by gradual emaciation. Swelling about the elbows was not noticed till a few days before death. The post-mortem showed symmetrical ostitis of the humerus and ulna, with a

large abscess round each elbow; and interstitial pneumonia at the bases of the lungs. All the other viscera were healthy. Though less advanced, the case quite corresponded with that of Mr. Warrington Haward shown at the last meeting of the Society.

Dr. COUPLAND showed a specimen of Medullary Cancer of the Prostate. The patient was a young gentleman, twenty years of age, who had been under the care of Mr. Nunn. He had been previously of good health; and it was only three months before his death that he first began to suffer from symptoms of disease of the urinary organs. After death, the pelvis was found blocked by a large medullary tumour, which had arisen in the prostate; the neighbouring lymphatic glands were infiltrated; and a few nodules were found in the pleura. The growth was composed of small angular nucleated cells, with a scanty alveolar stroma; and this, with the absence of any intercellular material, determined its position with the carcinomata rather than the sarcomata, in spite of the uniformity in shape and the prevailing small size of the cells. The case also contrasted with that of lymphoma of the prostate recently shown.

Mr. KNOWSLEY THORNTON showed Tumours of both Ovaries. The interest of the case did not lie in the tumours shown, but in the extensive peritoneal infection, the consequence of rupture of a cyst in one of them, which was seen at the time they were removed about a fortnight back by ovariotomy. The case had been under his observation from the early appearance of an ovarian tumour of the right side, from the first appearance of the tumour in the left side, which closely simulated fibroid outgrowths from the uterus, and was under his observation when a large cyst in the right-side tumour burst. From this he dated the peritoneal infection, which was evidenced not only by the presence of the solid growths which are common in cases of ruptured ovarian cyst and with malignant abdominal tumour, but also by the presence of a small multilocular cystic tumour growing from the edge of the omentum—the presence of the latter making the case perfect as an example of a process of cell-infection. Whether these cases were spermatic in their nature, or whether the cells actually take root, he was not prepared to say, but he inclined to the former as the more probable theory. Some of the compartments of this minute multilocular cyst exhibited most beautifully vacuolation processes in the cells of their lining membrane (drawings of which were shown). Mr. Thornton hoped to deal more fully with this important case in the Transactions of the Society.

Specimens of Ovarian Tumour, of Pneumonia in Birds, Calculus in Ox, &c., were shown by Dr. CRISP; of a Shawl-pin spontaneously evacuated after being eleven months in the pharynx, by Dr. J. DUNBAR; and of Fibrinous Clot in the Heart by Dr. MONRO; but our space does not allow us to give the details of these cases.

Before adjourning the meeting the PRESIDENT stated that, although the Scientific Grants Committee of the Royal Society had been obliged to refuse the application of the Pathological Society for a grant of £350 for an investigation into Pyæmia, this sum had been granted by the Local Government Board, which is continuing its Scientific Reports. The Working Committee, appointed by the Council of the Pathological Society to pursue the research, is composed of Mr. Marcus Beck, Dr. Greenfield, Mr. McCarthy, and Dr. Ralfe; and a General Committee has been appointed to represent the various hospitals, consisting of Dr. Broadbent, Mr. Callender, Dr. Green, Mr. P. Hewett, Mr. Holthouse, Mr. Hulke, Mr. Hutchinson, Dr. Murchison, Dr. Sanderson, and Mr. J. Wood.

CLINICAL SOCIETY OF LONDON.

AT the meeting of this Society held on the 11th ult., the President, Mr. G. Callender, occupying the chair, several subjects of surgical interest were discussed.

Mr. MACCORMAC read notes of a case of Taliacotian Rhinoplasty, and exhibited the patient, a healthy girl, aged sixteen, who had lost the tip and both alæ of her nose when an infant, from the injection of a nævus situated on the nose, with the Pharmacopœia solution of pernitrate of iron, which had led to sloughing. Photographs showing the condition of the face before and after Mr. MacCormac's operation were also exhibited. Mr. MacCormac determined to attempt relief by means of the operation of Taliacotius. The apparatus for keeping the arm in position consisted of a pair of ordinary stout stays, with two perineal straps attached to prevent displacement upwards; a helmet, partly made of leather, connected to the stays by a leather band running up the centre of the neck and back; an armpiece, strengthened by a steel band moulded in leather, and extending from the wrist to the shoulder, where it was buckled to the stays; and a gauntlet for fastening the wrist and hand to the helmet; while the elbow could be fixed in any required position by straps running from it to the stays and to the sides of the head-piece. There was nowhere any undue strain, and the apparatus was applied for days before the operation, to accustom the girl to its use and remedy any defects in it. It proved to be so comfortable that she could sleep in it. A gutta-percha model of the part required to make good the deficiency was made, and thus the extent of the latter could be projected on a flat surface. On February 12th, 1877, a flap was mapped out on the inner aspect of the left arm two-thirds larger than the actual size of the estimated deficiency; it remained attached to the arm by a broad long pedicle, and consisted of all the tissues down to the muscular sheath. A triangular gap was next made on the right side of the nose, and into this the flap from the arm was fitted, where it became partly united by the first intention. Subsequent suppuration occurred round the flap, but it had all united within three weeks. Then the operation was completed by detaching the base of the flap from the arm, and preparing the left side of the nose to receive it, where it was adjusted by sutures. In a fortnight healing was completed. The dressings of the arm and nose consisted of cotton-wool soaked in olive-oil. The leathern apparatus answered its purpose completely, and without inconvenience. For the first two or three weeks after the operation much contraction of the new nose occurred, but very little subsequently. The extensive wound in the arm had nearly healed on May 11th, 1877. The nostrils were kept dilated by india-rubber tubing. The improvement effected in the girl's appearance was most satisfactory.—The PRESIDENT, in introducing the case to the meeting, said he thought the operation was likely to be followed by better results than ordinary.—Mr. MAUNDER said everyone could appreciate the value of a good nose. He congratulated Mr. MacCormac on having given his patient a handsome appendage, and also on his having improved upon the method of Taliacotius, who, if Hudibras may be credited, required a second person to provide the necessary integument, and that, too, from a very inconvenient region of the body.—Mr. FURNEAUX JORDAN remarked on the good symmetry of the organ, the two sides being exactly alike. There was, moreover, no disfiguring scar on the face. Had Mr. MacCormac tried any other method? Mr. Hardie, of Manchester, had in one case taken the flexor surface of the thumb, and made an excellent nose from it. The apparatus ceased to be irksome after a time.—Mr. SPENCER WATSON alluded to the perfection of the apparatus used, inasmuch as this operation was probably given up on account of the irksomeness induced by the entailed position. Moreover, the nutrition of the parts to which the new skin had to be attached was perfect, and not half destroyed, as in lupus. Was any impairment of smell left behind?—Mr. GANT asked if the part was protected by cotton-wool or any such substance after operation?—Mr. MACCORMAC, in reply, said that the connexion between the new nose and the arm was divided three weeks after the transplantation, but in all probability this might have been safely done at the end of two weeks. The new part bled freely; there was no sloughing whatever. The only dressing was oiled lint. The apparatus admitted of ready dressing.

Mr. FURNEAUX JORDAN then read notes of a case of Excision of the Os Calcis and the Astragalus, in which the second row of tarsal bones was subsequently drawn underneath the malleoli. It was that of a girl aged fourteen, who was supposed to be the subject of caries of the os calcis. For this condition gouging had been resorted to without

success, although followed by careful and prolonged rest. As the direction of the carious area seemed to extend upwards, and new sinuses pointed to the implication of the astragalus, Mr. Jordan determined to excise both the os calcis and the astragalus. The bones were reached by means of a flap made at their outer aspect, the convexity of which looked downwards and slightly backwards. In the after-treatment, the foot was most easily kept on a line with the axis of the leg by holding it up by means of the toes. Healing went on favourably, so that in eight weeks the wound and the sinuses had healed, and the foot could be moved and handled without pain. But now a curious circumstance attracted notice. It was found that not only had the foot become shorter, but that, the first row of tarsal bones having been removed, the second row had in some degree taken its place. The scaphoid and cuboid bones were partly under the malleoli; the tibia and fibula were thus kept at some distance from the floor when the foot was put down. This unexpected result was, no doubt, brought about by the action of the muscles which lay at the front and sides of the ankle-joint. The weight of the body had now been placed on the foot with some retentive apparatus for several months without any sign of deformity or weakness. In conclusion, the question was asked: Assuming that it was desirable to bring the scaphoid and the cuboid under the malleoli after excision of the os calcis and the astragalus, could any special operation, or dressing, or position facilitate such a result?—Mr. MAUNDER fully agreed with the author as to the inveterate character of caries of the bones of the foot, and he advocated accordingly in hospital practice the removal of the bone in preference to repeated gouging. Thus much time and pain were saved to the patient. In the case under consideration the operation was most successful, but Mr. Maunder feared that possibly the abnormal pressure to which the bones left would be subjected in a person whose occupation required her to be on her feet many hours daily, would lead to further caries and further operation. In the normal foot each bone is called upon to support only a certain proportion of the weight of the body, but after such an operation as is above described, the extra degree of weight may prove highly injurious to the remaining bones. Mr. Maunder also advocated excision of the os calcis by an internal flap, so as to avoid leaving a cicatrix on the sole of the foot. He had then such a case at the London Hospital.—Mr. GANT said that he had excised the os calcis in a few instances, and in one the cuboid also. In that case there was retraction under the malleolus, and the foot had the appearance of "flat-foot." He thought gouging of the tarsal bones to be worse than useless.—Mr. SPENCER WATSON had little doubt that where the disease was extensive, excision only was of avail; but he had seen cases of limited caries successfully treated by gouging and the injection of sulphurous acid—a plan adopted by Mr. Carr Jackson.—Mr. F. JORDAN admitted that gouging of the surface was useful in many cases. In the present case it was of importance for the patient to keep his foot, and therefore excision was preferred to amputation. He quoted Mr. Syme's opinion as to the tendency of tarsal caries to relapse. In twelve cases Mr. Syme had to remove the foot for relapse of caries, after Chopart's operation had been at first performed.

Dr. DOWSE read notes of a Fatal Case of Syphilis, contracted from the Congenital Form of the Disease. It occurred in a young girl, aged nine, who was admitted into the Central London Sick Asylum, at Highgate, on January 12th, 1875. There was no history of congenital syphilis, excepting that the mother had eight miscarriages, and no objective signs beyond an irregular and notched condition of the incisor teeth of the upper jaw. There was no interstitial keratitis, no pigmentary change of the choroid, or optic neuritis. According to the mother's statement, her daughter was born without a blemish, and grew up to be a strong healthy girl until the month of July, 1873. At this time she was living neighbour to a family who were known to be syphilised, and she took an especial fondness for one of these children (an infant), who, in addition to other sores about the body, was suffering from mucous tubercles around the anus. She was constantly nursing this child, and neglecting a scratch upon the flexor surface of the right forearm (upon which she carried the child), she soon found it became very painful, and shortly formed an open wound, with indurated edges. The lymphatics became affected and the axillary glands enlarged. The precise period of incubation was unknown. From a fine healthy girl she became rapidly emaciated, complained of aching pains all over the body, followed by the train of signs and symptoms which were fully delineated in Dr. Dowse's remarks and in the photographs which were exhibited. He stated that there was considerable destruction of the ala of the nose, and that the ulceration extended to the pharynx, larynx, and, as was found at the post-mortem examination, to the trachea and larger bronchi. So severe was the ulceration of the throat and pharynx that swallowing was at times almost impossible. The eruption upon the skin first made its appearance as a lenticular syphilide, which rapidly ulcerated, giving rise to a fetid discharge and crusts resembling a modified rupia. The chest, abdomen, flexor surfaces of the arms and thighs were comparatively little, if at all, affected; but the head, the nose, the angles of the mouth, the extensor surfaces of the extremities and the back were covered. The rapidity of change from the destructive to the reparative process was a marked feature in the case. Dr. Dowse said he could scarcely pass to its pathology without making some few remarks upon the treatment, and here he considered that he failed most unfortunately, for the reason that nature was doing battle most manfully. Upon several occasions he thought her cured, but the disease again recurred with greater severity. He tried every remedy, but mercurial inunctions proved more beneficial than increasing doses of iodide of potassium. Dr. Dowse finally remarked that most writers upon syphilis speak of the rarity of rupia in syphilitic children. Zeissl says that, with his large opportunities, he had rarely seen such cases; and Cullerin remarks that he has never seen it. The clear history in this case appeared to give it greater interest, for the child contracted the disease in the secondary stage, and then gave evidence of a secondary eruption, which rapidly passed into the tertiary form. The patient was of fair complexion, with light, very fine hair, and long eyelashes, just a girl in whom lupus might in all probability be anticipated; and it certainly became a question as to the exact difference between the ulceration about the nose and lupus, and might lead to a point for discussion as to how far lupus might originate and be due to a modification of the prime syphilitic agent; and again, should it be correct that the patient was the subject of hereditary syphilis, it went to prove, what had hitherto been to a great extent denied, that hereditary syphilis could be acquired in a girl the subject of hereditary taint.—The PRESIDENT remarked that the case was a most rare one, especially as to the manner in which the disease was contracted.—Dr. CAYLEY was not quite satisfied that the child was the subject of hereditary syphilis; it had no distinct signs of this before the acquired disease showed itself. The notching of the teeth was not by itself distinctive. Other forms of stomatitis unquestionably produce notching.—Dr. DOWSE admitted that the notching was the only mark of hereditary syphilis, and there was no history of syphilis in the parents.—Mr. MORRANT BAKER remarked upon the short interval between the primary symptoms and the tertiary phenomena.—Dr. DOWSE said that the ulceration of the nose resembled lupus, and the whole train of symptoms was evolved with a remarkable rapidity.

Dr. IRVINE read the notes of a Case of Abscess of the Liver and Empyema, in which paracentesis was performed. The patient, aged forty, was admitted into Charing-cross Hospital, under Dr. Silver, on February 16th, 1877. He had been a soldier; was in India five years, where he drank freely, and was invalided at twenty-eight because of chronic dysentery. After his discharge he had tolerable health, and no return of his dysenteric symptoms; but, just before Christmas, 1876, he caught cold, began to cough and spit, and suffer from pains in the right chest. The cough became worse and worse, and was accompanied by dyspnœa. He lost flesh rapidly, and sweated greatly at nights, but had no rigors, no diarrhœa, and no pain in the right hypochondrium. Shortly after admission he could breathe calmly in the recumbent position, but complained of a distressing cough. He was much emaciated; his nails were incurved. The superficial veins of the thorax were distended; the right side was bulged, and showed scarcely any movement. There were dulness, diminished vocal fremitus, and weak, though bronchophonic, resonance over the whole right chest, back and front. The heart and liver were displaced;

the liver could be percussed from an inch to two inches below the margin of the ribs, but its edge could not be felt. There was no bile in the urine. On the morning of admission the temperature was 100·2° F. There was no improvement from his stay in the hospital, and the dyspnœa became more distressing. The temperature varied considerably, on one occasion falling 5° in little more than a day without obvious general improvement. On March 2nd a trocar was passed through the ninth space, behind the posterior axillary line, where the empyema seemed to be pointing, but only two ounces of pus mixed with blood were brought away. The temperature sank to 97·6° afterwards, but on the second day the patient's condition was most critical, and a free opening was made in the eighth space, in the mid-axillary line, and by means of a probe connected with that made in the ninth space. A tube was passed, and about a pint of sero-purulent matter escaped. This gave temporary relief, but it was dangerous to proceed with operative measures. The man died next day. It was found post mortem that the lower puncture had passed below the diaphragm into an abscess of the liver, from which the first pus had come; the opening in the eighth space had passed above the diaphragm into the pleural cavity, but the diaphragm was bound by old firm adhesions to the chest-wall, and because of these adhesions the operation had been inefficient. A catheter went through the eighth space, diaphragm, abscess of liver, and out through the ninth space. The pleura was full of sero purulent matter; the lung completely collapsed, and adhered to the diaphragm. The liver was displaced and altered in shape; its right lobe was rounded, the gall-bladder wholly anterior, and there was no edge. This lobe was lying anteriorly as high as the sixth rib and as low as three inches below the margins of the ribs. The left lobe was completely under the sternum and under the adjacent left cartilages. It seemed probable that the man had been the subject of hepatic abscess, which had for years been latent; that, perhaps as a consequence of direct transmission through the diaphragm, pleurisy had from time to time occurred, and finally ended in a very acute attack and empyema. The chronic nature of the disease was proved by the position of the liver and the adhesions which existed between it, the diaphragm, and lung. The diminutions from time to time in the amount of pleuritic fluid would vary the infrathoracic pressure, and modify, therefore, the position of the liver, which, besides, was completely changed in shape by its own internal disease. Clinically, it seemed impossible to arrive at a diagnosis of the exact conditions in cases like this. All the usual distinctions between empyema and hepatic abscess were wanting, and it was impossible to determine how far the liver ascended in the thorax. The effects of respiration were valueless, because there was no respiratory lung on the right side; the points where vocal fremitus and resonance ended were useless, and the difference in resistance at the margin of the ribs was like that met with in simple pleurisy with displacement of liver, because of the peculiar twisting and shape of the latter, which also prevented any lower edge from being felt. As regarded the operation of paracentesis the case was of most interest. It was impossible to have avoided the belief that the pointing in the ninth space was empyemic, because the signs of empyema were so certain, while of hepatic abscess there were none. Physicians were asked, before surgeons operated, to say where the liver began, and though wounds of different organs were not of serious importance in the operation, it was well to make it is perfect as possible. The case was an illustration of the difficulties which arose in the diagnosis of the exact relations of lung and liver in hepatic abscess and empyema.—Dr. SILVER said that, had he known the case was coming on for discussion, he might have been able to furnish some more exact details than were contained in the paper. There were, however, certain facts in connexion with the case as a diagnostic puzzle which were worthy of notice. The man had been a soldier in India, where he had drunk a great deal. He had been discharged on account of disease of the liver following dysentery, and since his return to England he had often drunk night after night as much as a bottle of brandy. It was fair to conclude from such a history that the liver was likely to be in a very unsound condition. He was employed as a "commissionaire," and was much exposed to cold and wet about Christmas, since which time he had suffered from a cold and cough. A day or two before admission he was suddenly seized in Hyde-park with a violent pain in the right side, with exacerbation on coughing, and with difficulty reached home. When admitted, his right pleura was full of fluid, but from the history it was not quite clear whether the pleurisy was recent or of some standing. He did not improve after admission, and his temperature showed regular and considerable nocturnal exacerbations, and as the fluid did not yield to treatment it was determined to ascertain its nature, with a view to relief either by aspiration or drainage. The liver could not be felt, and when the man inclined to his left side, so as to expose his right for percussion, but little liver-dulness was appreciable. The fluid seemed pointing in the ninth interspace nearly in a line with the angle of the scapula. Here the needle of the aspirator was introduced, and pushed in for some distance. About two ounces of thick grumous fluid came away. The character of the fluid showed that successful aspiration was hopeless. Accordingly, an opening was made with the knife, but on that occasion no additional fluid came away. The extremity of a drainage-tube was introduced to keep the wound open, in the hope that during the night the fluid might escape by its side, but this did not take place. On Sunday, finding the man much worse, the original wound was deepened, much of the same kind of pus coming away, and a counter opening was made higher up in the chest; between these two a thick elastic catheter was passed and fastened in, hoping that thus at last the accumulated fluid would find free vent. Unfortunately it did not. Dr. Silver did not again see the patient alive, nor was he able to be present at the post-mortem examination, when it appeared that the pus actually came from an old abscess in the liver The lungs were too completely collapsed to entitle one to think of more than partial and temporary aspiration.—In answer to a query from Dr. COUPLAND, as to whether the heart returned to its normal position after the first tapping, Dr. IRVINE replied in the negative. At the post-mortem examination the heart was much displaced.—Dr. DOUGLAS POWELL said that in such a case he would not be content with one or two incisions, the displacement of the heart being evidence that all the pus was not evacuated. He related a case, in the treatment of which he was assisted by Mr. H. Arnott. The case was one of empyema following a miscarriage. Mr. Arnott had great difficulty in evacuating the pus. At first an exploratory puncture gave exit to a considerable quantity. The wound was then allowed to close, and on two subsequent occasions pus again evacuated. Then Mr. Arnott made a free incision, but still the fluid would not escape; but by keeping the wound open by a plug of lint much discharge came away, and the patient eventually recovered. In the present case, exploration by means of a probe might have been of value. Certainly the fact that the heart remained markedly displaced after the operation showed that much fluid was still left behind.

At the close of the meeting, Mr. HENRY MORRIS exhibited some specimens of the external iliac and common carotid arteries, removed from dead subjects, which had been subjected to constriction by Dr. Fleets Spiers's "artery constrictor." He also demonstrated the mode of application of the instrument. The constrictor acted much as the ligature and torsion by dividing the internal and middle coats; it did not, however, destroy the external coat, while the inner coats could be peeled away and involuted to a degree varying with the extent to which the screw of the instrument was worked. The specimens showed the success of the constriction. The instrument had to be applied for a few seconds only, and, after its removal, it was found that the involution of the coats was of itself sufficient to resist the flow of fluid injected into the artery. The results of experiment on the dead subject, and the trials which had been made of the constrictor on the living by American surgeons, were very satisfactory; so that it deserved, Mr. Morris thought, a fair trial from all surgeons interested in measures having for their object the checking of hæmorrhage or the occulsion of arteries in their continuity, without leaving any foreign body whatever in the wound. In aneurisms of the arch of the aorta, of the innominate, carotid, subclavian, and axillary arteries, torsion was impossible; Esmarch's bandage out of the question; compression was neither convenient nor safe, even when it could be borne; carbolised catgut ligatures had been proved to be unreliable, and the galvanopuncture was fraught with dangers of its own. In such

cases as the above, constriction by the "artery constrictor" seemed to possess advantages over all other methods, and promised a fair amount of success. Mr. Morris pointed out that it was most essential that the hook of the instrument should be accurately made, or it would lacerate the external coat. Such he found to be the case with a constrictor made in this country from the drawings in Dr. Spiers' original paper. This had led him to obtain a pattern, through Mr. Hawksley, from America, made by the instrument-makers employed by Dr. Spiers.

Reviews and Notices of Books.

A System of Medicine. Edited by J. RUSSELL REYNOLDS, M.D. Vol. IV., containing Diseases of the Heart. London: Macmillan. 1877.

[FIRST NOTICE.]

THE present volume of Reynolds' System of Medicine has been so long expected, and so repeatedly delayed, that many will have become sceptical as to its appearance. It is well known that its delay was owing to the fact that the late Dr. Sibson had undertaken a considerable portion of the work upon the subject, and that the mass of material which he had accumulated, and the elaborate investigations which he had undertaken to clear up certain points, had prevented him from completing the work until shortly before his sudden decease. We have thus in the present volume the resultant of the observations of a lifetime, and of the hard and patient work of its last ten years in completing, classifying, and digesting those observations.

In the present notice we shall confine our attention to the portion of the work performed by Dr. Sibson. We cannot overlook the fact that his articles, both in their elaboration and length, bear rather the character of monographs, and are entirely disproportionate to most of the other articles in this and the preceding volumes. But their intrinsic value fully justifies the editor in his decision not to alter or pare them.

The articles on Pericarditis and Endocarditis are by far the most elaborate, and, together with those on the Position and Form of the Heart, and Adherent Pericardium, occupy nearly 500 out of the 800 pages which make up the volume. Those who know anything of the author's method of work will appreciate the difficulty in selecting points for observation or criticism. It would not be difficult to criticise both the method and results of the work. Enthusiastic in his devotion to minute observation, laborious in the accumulation and ordering of facts, and thoroughly convinced of the value of the statistical method, Dr. Sibson was, as a writer and lecturer, in danger of being overmastered by the multitude of his facts, and of allowing his clear outlines to be lost in the details surrounding them. That he was by no means devoid of the power of graphic description will be evident from some parts of his work. But, as a rule, he did not arrange his facts so as to bring into prominence the more striking and important, and to leave the lesser to form a mere background, so as to present at once an effective and intelligible picture of disease, whilst not losing sight of the value of detail. Had he possessed or used such a faculty, we must allow that he would have exhibited genius of a very rare order.

The articles on the Position and Form of the Heart and Great Vessels contain much that will be found in the author's work on Medical Anatomy, which first established his scientific reputation. The precise shape, size, and position of each part of the heart are first thoroughly investigated. In discussing the relative position of the cardiac valves, Dr. Sibson strongly insists on the fact, in which he is no doubt correct, that of the three semilunar folds of the aortic valve, two are really posterior and only one anterior, instead of two anterior and one posterior, as they are often incorrectly described; the left posterior being that from which the left coronary artery springs. The changes in position during action of the organ are next discussed; and this section is followed by an elaborate criticism of the observations of Pirogoff, Braun, and Le Gendre. Of greater clinical interest is the brief and far less elaborate paper which succeeds it, on the Malpositions of the Heart due to abnormal conditions of surrounding viscera.

But it is to the essay on Pericarditis that we must turn as the most remarkable of Dr. Sibson's labours, and the best memorial of his work. The disease is most exhaustively discussed from every point of view, each several symptom or physical sign being treated of separately, and in every case the proportional frequency of occurrence and the association with other symptoms estimated by a comparison of statistics. The paper treats of the pericardial affection as it exists in connexion with acute rheumatism, Bright's disease, and pyæmia separately. The cases of rheumatic pericarditis on which the paper is based are 63 in number, out of a total of 326 cases of acute rheumatism that were under the author's care in St. Mary's Hospital. The statistics given show that endocarditis is nearly three times as frequent as pericarditis, and that pericarditis is rarely unaccompanied by endocardial affection, only 9 of the 63 cases entirely escaping. As regards the influence of occupation in predisposing to rheumatism and heart affection, Dr. Sibson very strongly insists on the fact that the employment of female domestic servants combines all the conditions most favourable to its production,—growth and labour, combined with exposure to variable temperature, being the most important factors. It must, however, be remembered that of the whole number of female patients attacked with acute rheumatism more than three-fifths were domestic servants (101 in 168), and that in this respect statistics drawn from hospitals are of necessity liable to mislead. Two other important points which come out are that laborious occupations appear greatly to increase the tendency to pericarditis; whilst painters and plumbers, as working in lead, and brewers and waiters, whose habits tend to induce gout, are but rarely affected. It is often stated that at the onset of severe pericarditis the joint affection tends to diminish, and that the severity of the latter is frequently in an indirect ratio to that of the former. This, however, is shown to be an error, for Dr. Sibson proves that severe joint affection and pericarditis are usually associated, and that only in about one-half of the cases does the joint affection become lessened in severity when the pericarditis is at its acme. Another important point is the relation of valvular disease to pericarditis. It is shown that permanent valvular lesion occurs with greater frequency where endocarditis and pericarditis coexist than when endocarditis alone is present—a fact which may be attributable to the greater intensity of the inflammation in the former case. Pain in the region of the heart was found to occur in a large proportion of cases, most commonly over the whole cardiac region, and with less frequency either at the epigastrium or the interscapular region, the latter after swallowing or eructation. And, in relation to this latter point, it is remarkable that no mention is made of vomiting as of occasional occurrence at the onset of severe pericarditis, a symptom which has been ascribed to inflammation of the vagus or phrenic nerve, though, perhaps with more reason, to irritation of the diaphragm. This omission is the more noteworthy, since loss of voice is mentioned, and is ascribed to implication of the recurrent laryngeal by contiguity with the inflamed pericardium.

The section on Affections of the Nervous System in

Rheumatic Pericarditis is one of the most interesting, and displays the remarkable faculty possessed by the author of collecting and classifying the observations of others in addition to his own. No less than 180 cases are thus collected and tabulated. The heading of the section is obviously incorrect, for in it are considered not only cases associated with rheumatic pericarditis, but all cases connected with acute rheumatism, and also with pericarditis not of rheumatic origin. The cases are divided into two classes—those in which the temperature was observed, and those in which there is no record of it. Of the sixty-one cases in the first class, nearly one-half appear to be cases with a temperature over 106° F., associated with endo- or pericarditis, the highest temperature recorded being 111·6° F. The majority presented delirium followed by coma, stupor, or convulsive movements, delirium without coma also occurring in some, and more rarely coma or convulsion without delirium. Three cases of hyperpyrexia without delirium are also mentioned. But, true to his preference of facts to theories, and observation to explanation, Dr. Sibson scarcely attempts to consider what is the cause of the remarkable phenomenon of hyperpyrexia, and merely alludes to the occurrence of high temperature in sunstroke and after injury to the cervical spine as possibly presenting some analogy. Neither do we find any mention of the occurrence of cerebral or spinal meningitis in association with rheumatic pericarditis, a fact so thoroughly established by observation that it should at least be kept in view in discussing the causes of hyperpyrexia. The subject of temporary insanity associated with acute rheumatism also receives a good deal of attention. Twenty-seven such cases are recorded, fifteen having endo-pericarditis, six simple endocarditis, one pericarditis, and five no obvious cardiac affection. The form of insanity was in the majority melancholia, with taciturnity and often refusal of food; in a few hallucinations were present, but these were comparatively infrequent. The duration was from three weeks to three months. Dr. Sibson refers the origin of the mental derangement to capillary embolism, and in support of this view adduces the general history, the common coexistence of endocarditis, and the fact that in some few cases emboli of the smaller or larger cerebral arteries have been found.

We pass by the section on the Physical Signs of Rheumatic Pericarditis, noting by the way the abundant employment of the graphic method and the elaborate signs used by the author to indicate on diagrams the presence and position of certain physical signs. Nor can we do more than indicate the value of the exhaustive investigation into the coexistence of pericarditis with Bright's disease, pyæmia, and other general diseases.

We come now to the treatment of the affection, preventive and curative. Dr. Sibson remarks that "the chief objects to be kept in view in the treatment of acute rheumatism are—(1) the mitigation of the endocarditis, which is the usual and natural effect of that disease, and (2) the prevention of pericarditis, which, though the frequent, is not the customary, complication of that disease." Absolute rest of the affected joints, and local measures to relieve pain and to afford warmth to the joints, are the means upon which he relies rather than on measures directed to the cardiac region. During the attack, the employment of leeches over the heart, and cotton-wool with chloroform and belladonna liniment at the onset, appeared to diminish local pain and inflammation, but their effect upon an already present effusion appeared to be slight or doubtful. Of blisters, the author not only does not speak in terms of praise, but appears to be inclined to attribute to them directly evil effects. "I cannot," he says, "find any instance in which they appeared to be of service, and they were certainly in some cases a source of discomfort." Nor does the indictment end here; for he adds that they cannot do any good, that their tendency, if any, would be to increase the hyperæmia of the inflamed parts, and that they are apt to tend to secondary low inflammation in distant parts, even to degrade the character and prolong the existence of the pericarditis itself. The sole benefit which he allows is that they may lessen the severity of internal pain by exciting external; and this, he adds, may be done by other less objectionable means. In spite of these grave charges, we cannot but suspect that some little prejudice in favour of leeches must have inspired the aversion to blisters, and this is the more natural as a large number of the author's observations would have been impossible if in every case they had had to be conducted on a blistered surface. Paracentesis of the pericardium is next discussed, and the recorded cases of operation are mentioned. After describing the various methods of operation, Dr. Sibson observes that in cases where it is really necessary the fluid must exist in quantity below the level of the heart itself, and he therefore recommends the insertion of a fine trocar or aspirator needle at a point just above the upper edge of the sixth left cartilage, at the lowest part of its curve, more than an inch within the mammary line, and that the instrument should penetrate partly inwards and in a slightly downward direction. When, however, the heart itself is enlarged, owing to valvular disease, this position would be unsafe, and Dr. Sibson recommends puncture either through the ensiform cartilage or between it and the inner border of the left seventh rib cartilage. We must, however, protest that the operation is almost never indicated in cases of purely serous effusion or of rheumatic pericarditis, and that in the extremely rare cases in which it may be called for, there nearly always exists considerable dilatation of the heart, due to paralysis or inflammatory softening of its muscular walls; and we believe that in the majority of cases the symptoms ascribed to the pericardial effusion are really due to this cause. A warning on this point is the more necessary, because the author, whilst stating that puncture of the pericardium is very rarely called for, omits to point out these important facts, and the attention bestowed on the method of operation might lead to an erroneous estimate of its frequency or necessity.

A brief article on Adherent Pericardium is extremely good, and worthy of careful study. The varying anatomical conditions are very carefully and thoroughly described, and the history of the disease, the symptoms and physical signs, concisely detailed. The signs most valuable in diagnosis of adherent pericardium are stated to be a retraction of the intercostal spaces and lower end of the sternum during systole, and a diastolic recoil or back-stroke of the lower half of the sternum, the latter alone being pathognomonic. Constancy in the area of cardiac dulness, under varying respiratory conditions, and absence of displacement of the apex when the patient turns on the left side, are also valuable indications. Other signs are considered to be of less significance.

We have devoted so much space to the article on Pericarditis that we must leave that on Endocarditis almost unnoticed. This, however, is of the less importance from the fact that there are indications throughout a large part of the article of some haste, as if the author had simply transferred rough notes of cases without carefully digesting them. There is, however, a large amount of valuable material, and some parts are carefully written; but the article as a whole will not bear comparison with that on pericarditis, which is the best memorial we possess of the author's genius and work. In conclusion, we cannot but heartily concur in the remark of Dr. Reynolds: "We have

in this volume the results of many years of Dr. Sibson's ardent toil, and the last, and, as I think, the best, production of that earnest, industrious, enthusiastic worker, and the most kind and genial friend."

The Students' Handbook of Forensic Medicine and Medical Police. By H. AUBREY HUSBAND, M.B. Second Edition. Edinburgh: E. and S. Livingstone. 1877.

THIS little book has run to a second edition in two years, so that we may conclude that it has been found to be a useful volume. This it certainly appears to be, for it has a very large amount of information compressed into an incredibly small space. In addition to all the subjects usually treated of in works on forensic medicine, the section devoted to "Medical Police" will be found full of the most varied and interesting matters, culled from many different sources. First we have a chapter on man subject to various physical and moral influences; then the individual man is considered. Next comes a chapter on vital statistics and life assurance. Mr. Husband then gives an epitome of hygienic matters, such as air and ventilation, climate, meteorology, drainage, water, food, dwelling-houses, epidemics, and contagion. Lastly, we have abstracts of some of the chief Acts of Parliament having reference to quarantine, and various sanitary questions. The author of this little work has read extensively both in the domain of medicine proper and in the region just outside of it, and this extended knowledge and the happy union of purely medical facts with others of more general interest, give the book an individuality, and certainly have the effect of making it very readable in spite of the great compression of its contents.

Analytical Records.

OFEN-RAKOCZY BITTER MINERAL WATERS.
(S. GALLAIS AND CO., 27, MARGARET-STREET, W.)

THIS mineral water is one of the most powerful salines we have met with. It contains a very large quantity of sulphate of magnesium, besides sodium, calcium, and other salts, and bromine is easily detected in it. Its taste is almost exactly that of a solution of Epsom salts. So many mineral waters now compete for public favour that it is not easy to decide between them, but there can be no doubt of the real activity of this one.

BISCUITS FOR MEDICINAL USE.
(J. BONTHRON, 106, REGENT-ST.)

We have received from the above well-known maker no less than six different samples of biscuits, &c., intended for dietetic treatment. No. 1 is called the "diabetic biscuit," and contains much gluten and very little starch. No. 2 is the "Regent biscuit," made from gluten and prepared bran. No. 3 is an "almond biscuit"; and the rest are modifications of the first two. They are excellent preparations; and though, of course, they are not so palatable as if they contained the normal quantity of starch, they can be eaten without difficulty or repulsion. Indeed it is not easy to see how they could be improved.

GRANULAR EFFERVESCING HYPOPHOSPHITES OF LIME AND OF SODA.
(YOUNG AND POSTANS, 35, BAKER-STREET.)

These useful medicines can be obtained in their new form of two distinct strengths—one containing five, the other ten grains of either hypophosphite to the teaspoonful. Our analysis shows that they are well made and accurately described.

LAXORA LOZENGES.
(P. GUYOT, 82, SOUTHWARK-STREET.)

We have no hesitation in recommending this preparation as a useful because mild aperient. The lozenges are exceedingly pleasant to the taste, and will be regarded by children simply as "sweeties." It is a great improvement on the preparations which are in common use for the same purpose, and will be really valuable in families.

PROCTOR'S REGISTERED EARTHENWARE MEDICINE MEASURES.
(S. MAW, SON, AND THOMPSON, ALDERSGATE-STREET.)

This appears to us to be the embodiment of a very sensible idea. The irregularities and even accidents arising from the use of spoons of different sizes as measures are familiar to all our readers. The spoons in common use do not correspond to the measures prescribed, and many variations are possible. It is now proposed to overcome these difficulties and to ensure uniformity by sending with each bottle, or at any rate with the first bottle of a series, a white earthenware measure to contain the prescribed dose. The measures cost a little over a penny each, are very neat, and would be popular in households. We recommend them warmly, and suggest that in important cases they might even be prescribed by physicians.

GUAVA PASTE AND JELLY.
(COSTA AND CO., HABANA.)

Guava jelly is now an article of considerable sale in this country. The jelly and paste inside the box are very good, but not different, so far as we can perceive, from the similar articles now so often seen on the dining-table.

BRAVAIS' DIALYSED IRON.
(BURGOYNE AND CO., COLEMAN-STREET.)

Graham's memorable discovery of dialysis received one of its first applications in the preparation by him of liquid ferric hydrate. Ferric chloride in solution dissolves a large quantity of the hydrate, and when the mixture is dialysed the crystallised chloride passes through the membrane, while the colloid hydrate remains behind in aqueous solution. Such a solution, neutral, tasteless, and containing but little chloride, is now before us. It is precipitated both by acids and alkalies, but can be mixed with water in all proportions. It is a beautiful and interesting preparation, and, like most of those which come from Paris, is neatly got up in a box containing a little pipette and india-rubber cap for the delivery of drops.

It is right to add that Messrs. Squire, of Oxford-street, manufacture the same solution, and claim to have introduced it as long ago as 1869.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.—The thirty-fifth annual meeting of this Society was held on the 4th inst., at the King and Queen's College of Physicians. The grants awarded this year amount to £1273, which includes a donation of one hundred guineas from Dr. Kidd, being thus distributed: to medical practitioners £357, widows £763, and orphans £153. During the year there were 103 applications for assistance, a number much above the average. Resolutions were adopted that the Society was eminently deserving of the confidence and support of the profession at home and abroad, and that the medical students who contributed to the funds deserved the best thanks of the Society for their warm sympathy and substantial aid.

BEQUESTS, &c., TO MEDICAL CHARITIES.—Mr. William Coulson, F.R.C.S., bequeathed £1000 to St. Mary's Hospital, Paddington; £500 to the Penzance Dispensary; and £500 to the Royal Sea-Bathing Infirmary, Margate. The Grocers' Company have given £100 to the Repairs and Improvement Fund of the Westminster Hospital.

THE LANCET.

LONDON: SATURDAY, JUNE 9, 1877.

IF the Lord President, at a moment when the profession is singularly dissatisfied with the Medical Council, used the exact words to the deputation from the Council which he is reported to have used, it becomes all who realise the importance of the relations between the State and the medical profession to consider their import and their fitness. We are told by the President of the Council that "incidentally the Lord President observed—what he was sure the Council would be glad to hear—that he himself, and the Government generally, feel that a body constituted like the Medical Council is in full possession of the knowledge of what is necessary in relation to medical questions, whether viewed professionally or in a more complete and national sense." As Dr. ACLAND only spoke from memory, and has perhaps naturally a ready ear for words of confidence from ministers, he may have taken a larger view of the import of the minister's words than, strictly interpreted, they will justify. "Medical questions, viewed professionally, and in a complete and national sense," is a very large expression. There can be no doubt that with the advance of civilisation and of medicine every Government will find itself compelled to take counsel of some medical authority. Are we to understand that the Government, having abolished the office of medical adviser to the Privy Council, means to consult the General Medical Council upon all medical questions? This would appear to be a cheap way for a Government to get its medical advice, but we are not supposed to have in office a Government guided by mere economical considerations. We venture to say that this way of getting medical advice would be neither cheap, dignified, nor effective. The constitution of the Medical Council is defined by Act of Parliament, and so are its duties, and whichever of these be regarded, it must appear to the Lord President, as it does to us, that the Medical Council is not a body on which the Government can rely for guidance "on medical questions," in the broad sense of that word.

It is due to the Government to point out that the only subjects in reference to which the Lord President sought the advice of the Council—according to the statement of Dr. ACLAND—were those of the registration of colonial and foreign degrees, and, secondly, the education of midwives. Both of these subjects involve questions of medical education, and might on this account be thought fitly referable to the General Council of Medical Education. But one or two facts will show how unfit the Medical Council is to advise the Government even on the latter point. First, there is not one man in the Council familiar with the practice of midwifery, to say nothing of the absence of an eminent obstetrician. Sir DOMINIC CORRIGAN showed this forcibly. Four years ago the Council considered this subject, and could come to no clear conclusions about it. Since that time women have been suffering seriously from the existence of a class of perfectly ignorant and uneducated midwives. Our readers will have noticed how lame and helpless were the conclusions of the Council at its late meeting on the question of the education of midwives; so that if the Government waits till it gets a practical scheme from the Medical Council, it will wait *ad Græcas Kalendas*.

If the Lord President will consider that in the Council obstetricians and general practitioners are conspicuous by their absence; that it consists essentially or mainly of representatives—many of them certainly very able and earnest—of the interests of teaching or examining bodies; and that it exists under an Act of Parliament for certain defined purposes—to wit, to make orders for regulating the registers to be kept under this Act; to represent defects in the courses of study and the examinations to be gone through to obtain medical qualifications to the Privy Council, and to prepare "a book to be called a British Pharmacopœia," he will be convinced that the Council is not a body to be consulted on "all medical questions" by the Government. For the specific purposes for which it exists it thinks it only necessary to meet once a year; and if the Government is to look to it for advice, it must either wait for a year or summon the President from Oxford to give irresponsible and personal advice.

It seems probable that Dr. ACLAND misunderstood the Lord President. But we cannot blind our eyes to the fact that the Government since the resignation of Mr. SIMON has drifted in medical questions. Mr. SIMON could not help remarking with much emphasis that "the Duke of RICHMOND in receiving a deputation from the Council charged with much technical matter had not in attendance any functionary of the medical profession." The Council seemed too much flattered with the idea of being brought into consultative relations with the Government to share Mr. SIMON'S concern at the fact that the Government seems to have no medical adviser to give continuous attention to medical questions, and to give it responsible advice. But we fully agree with him that there is no chance of getting matters of medical detail dealt with in a Government office unless there is some skilled officer to take them in hand. Is it not a fact that all the stimulus to conjunction of medical bodies and amendment of the Medical Act came from the ex-Lord President, specially informed and inspired by a medical adviser to the Privy Council? That gentleman now, unfortunately, is no longer such and has no successor. True, he is a member of the Medical Council. But in that capacity his power to advise the Government is much curtailed, as was painfully shown by the way in which the Council rejected his report on the urgent subject of midwives. The Government should at once understand that the Medical Council is a badly-constituted body, even for the purposes for which it was created, and that it can never take the place of a medical corporation specially informed in certain branches of the profession, and, still more, that it can never make up for the want of a Permanent Medical Officer of Government for the purposes of the civil service of the State as authoritative, and as much to be respected, in this Department, as the Medical Directors of the Army and Navy are in theirs. Do the Corporations mean to acquiesce in such views as are attributed, we trust erroneously, to the Lord President?

WE promulgate no strange doctrine in expressing a strong persuasion that private asylums for the insane—establishments maintained by private enterprise and for gain—are a mistake. They stand on an unsafe footing and exposed to perils too serious for toleration or neglect. The least important, probably, of the dangers attendant on this mode of providing for the custody and treatment of the mentally affected is that which appears on the surface of the situation. It is doubtless undesirable that a lunatic should be so placed that any person has an interest in the continuance of his malady. This, however, is an objection which might be taken to the almost universal relations of the sick with their medical attendants, and clients-at-law are in no better plight, especially since the modern custom of "refreshing" counsel has sprung into existence. If the imputation that proceedings before courts of law and equity are sometimes prolonged by this process of payment would be repudiated with indignant warmth, we think the medical profession may with equal energy resent the suspicion that patients are not cured as rapidly as possible because the fees will cease when the case is completed. It must be admitted that the proprietor of a private lunatic asylum is somewhat specially circumstanced, inasmuch as it is necessary the "average number resident" under his roof should be maintained, or the current outlay will not be compensated, and an establishment must be kept up. In practice there is, unhappily, no difficulty in securing a sufficient number of inmates for any well-conducted house, and the embarrassing obligation of those who provide for the reception of cases of this class is, commonly, to meet the demand on the accommodation at their disposal, rather than to obtain patronage. Moreover, in this as in every other branch of practice, the profit accruing to a reputation for prompt cures greatly exceeds the gain resulting from long terms of residence. Scarcely enough weight has been given to this view of the facts, even from the strictly commercial standpoint. In short, the pecuniary argument is not tenable, at least in relation to first-class licensed houses, under the existing condition of matters, when lunacy is so prevalent a malady that, as we have said, the competition is not to fill the establishments provided for "patients who can pay," but to secure their admission to the houses available for their reception. Nevertheless, we repeat, private institutions for the purpose in view are wrong in principle and socially inexpedient.

Obviously some special provision for lunatic patients above the level of paupers is requisite. In comparatively few instances is it possible to treat a case of mental derangement at home. Removal from the scene and companionship in which the mind began to go astray is generally a primary condition of the remedial *régime*. It will seldom happen that the patient can be surrounded with new associations and placed under efficient supervision and moral control in his own residence. The constant, vigilant care of a medical superintendent can hardly ever be obtained for a single patient except by persons in affluent circumstances. Moreover, there are manifestly substantial advantages to be gained only by the orderly conduct of a sufficiently large and suitably-appointed establishment. These, and contingent circumstances which need not be specified, make the provision of houses expressly adapted for the residence of a superior class of insane patients indispensable. And it is equally apparent that medical prudence, not less than social instinct, enjoins the observance of the same distinctions in rank among the sick which determine the usages and surroundings of life among the sound. There are the strongest grounds for believing that a highly sensitive state of feeling may coexist with the greatest distraction and seeming insensibility, just as the wildest misconceptions as to personal quality are found to be compatible with a ready compliance with the exigencies of strangely incongruous modes of existence. It is the art of the moral disciplinarian to correct the error in ideation by judiciously presenting the truth in fact and experience to the lingering or reawakened faculty of perception. The worst consequences must be expected to ensue from the introduction of patients above the ordinary level of paupers into public asylums as at present constituted. Such a procedure is not to be thought of. Meanwhile it is, we believe, not only desirable, but essential, to the successful control of lunacy that institutions should be provided with the immediate protection of the State and conducted by public officials, where patients of all classes may be placed under treatment in circumstances suited to their social position and fulfilling the obvious requirements of science and safety.

The grave objection to private establishments for the insane lies in the fact that, while the liberty of the subject probably requires considerable licence as to the treatment of ordinary disease, it imperatively demands that the power of imprisonment should not be trusted to any but public officers. It cannot be disguised that, as regards a very large proportion of the patients presumably "under treatment" for lunacy, the most that can be done for their advantage is to keep them out of mischief. In a word, what is called "treatment" is in fact confinement, and the function of keeping persons in confinement under the legal authority of two certificates of lunacy so closely resembles imprisonment that we have no hesitation in asserting it is one which should not be performed by any person who is not a public official, engaged and remunerated by public authority and acting immediately under official control. It may be urged that the protection afforded by the supervision of a Board of Commissioners is ample. We are unable to make the implied admission. Occasional inspection by commissioners who in a few hours pass rapidly in review a list of names, and a crowd of more or less incompetent persons, is not a very satisfactory guarantee of safety. For example, it would be manifestly impossible for any two Commissioners, however diligent and expert, to asseverate that the individuals seen by them at any inspection were those designated in the asylum list. It is not necessary to explain how mistakes might arise, or malpractices are possible. The bare fact that absolute security does not exist must give rise to a feeling of dissatisfaction, and should call for a remedy. We, however, prefer to take our stand on the general principle, and to assert that the power of holding Her Majesty's subjects in durance on any pretext ought not to be entrusted to any person except officers of the State or a public authority. It is not necessary to suppose this power has been recently, or will be again, abused. No one except a responsible agent of the Government, imperial or local, should be permitted to retain

or exercise it. The circumstance that it is for the safe custody, and if possible the cure, of a patient the authority is given, does not affect the question. The moment an individual has been deprived of his responsible rights and privileges as a citizen, he should be placed under the immediate control of the administrative authority. As we have said, in a majority of instances the inmates of asylums are simply *confined*—their treatment is a secondary consideration; while this is the case it is simply monstrous to leave them in the hands of irresponsible keepers. Nothing is gained by so leaving them, and the State is not absolved from the duty of efficient and constant guardianship. The control of property is assumed by the State the instant a doubt as to ownership arises. Minors are protected, even the property of lunatics is protected, and in certain cases the Lord Chancellor assumes the duty of watching over their lives. Equally vigilant supervision ought to be exercised in the case of all lunatics, and to ensure direct control, no person of unsound mind should be confined except in an establishment under the management of officials appointed by the Government, and remunerated by salaries payable out of public funds; in no way dependent upon the caprice of "friends"—possibly interested in the permanence of a case of insanity—or affected by the fate of the patient confined.

It would not be difficult to show that many substantial advantages as regards the provision made for lunatics, the treatment they receive, and their prospects of recovery and discharge, would result from their being placed in public institutions. It must not be forgotten that the inmates of pauper establishments are now, for the most part, persons who have experienced many trials and vicissitudes to which the patients in private asylums have not, speaking generally, been exposed. It would, therefore, be impossible to compare the statistics of recovery or mortality in the two classes of institutions. If the public asylums had the same material to work upon which now falls to the lot of the licensed houses the results obtained by treatment might be compared, and it is not improbable the outcome would strengthen the argument in favour of public institutions. With this question we are not, however, immediately concerned. It is in no spirit of captious criticism we urge the expediency of abolishing private asylums, but on the ground of principle. We do not base the plea on any imputation against the mode in which these institutions are at present conducted. They may be irreproachable, but their existence is opposed to the best interests of society and of the insane. It creates a peril from which the community should be protected; and, because it augments the danger of sane persons being confined as lunatics, and of convalescent patients being retained in a condition of legal incapacity and bondage longer than their mental state requires, we believe it is a subject which falls legitimately within the cognisance of the Select Committee now investigating the working of the Lunacy Laws, and should receive attention before the inquiry is closed.

M. PASTEUR recently informed the Académie des Sciences that he is working at the relation of minute organisms to the charbon of cattle and allied diseases. Bacteria were discovered in the splenic blood by M. DAVAINE in 1850, but lately M. PAUL BERT asserted that if the blood containing bacteria were submitted to the action of compressed oxygen, the bacteria would be killed and the blood would still communicate the disease, although it might not contain a single bacterium. M. PAUL BERT inferred from this experiment that the contagious power of the blood must be attributed to some other constituent of the blood. M. PASTEUR, however, is not of this opinion, and believes that another explanation can be given of the results obtained by M. BERT. Instead of attempting to destroy the bacteria by compressed oxygen, he filters the blood which contains them. The method by which he performs this very delicate operation he proposes to publish hereafter, but he asserts that he succeeds in freeing the blood altogether from the bacteria, and that it may then be injected without any injury to the animal. He infers from this that the septic substances are solid and not in solution.

A note on the same subject was communicated by M. BOUILLAUD, in which were described some experiments by M. FELTZ tending to show that the active poisonous principle of putrid blood consists only of formed ferments. The experiments are of three series. In the first, M. FELTZ took the blood of a healthy dog, and allowed it to putrefy at a temperature of 113° F.; large numbers of bacteria were developed in it. He then injected the blood into four rabbits. The animals died after a few days, all presenting the characteristic symptoms of septic infection. In a second series of experiments, he raised the temperature of some of the putrefied blood to 175°, when coagulation occurred. The clot was then diffused through distilled water, and the infusion thus obtained was found to contain bacteria. It was afterwards injected into four rabbits, which died in seven or eight days with the same symptoms as those into which the undiluted blood had been injected. In a third series of experiments, he enclosed some of the putrefied blood in iron tubes and exposed it to a temperature of 300°. No trace of bacteria could subsequently be discovered in the blood, and it had no effect on some rabbits into which it was injected.

M. PASTEUR, in response to a remark of M. BOUILLAUD on the necessity of specifying precisely the diseases from which the observations were made, asserted that he would take the fact of the presence of bacteria in the blood as the essential anatomical element of the affection which is the splenic fever of the sheep, the charbon of the ox, and the malignant pustule of man. Other maladies presenting similar symptoms, but in which the blood contains no bacteria, he would designate by other names. The same opinion was strongly expressed at the subsequent meeting of the Académie, and M. PASTEUR announced his intended investigation of the state of certain farms in which charbon and such diseases were frequent, and in the water or in the dust he hoped to find the germs of bacteria.

ANOTHER case of cruelty practised by an attendant in charge of insane patients at an asylum has been "settled" by fine. The culprit, a female, "brayed" the head of her victim on the floor, and beat her with a slipper. For this brutal offence the justice of Stockton inflicted a fine of £5 and costs. We must again protest that such punishment is wholly inadequate.

Annotations.

"Ne quid nimis."

HOMŒOPATHY AND ITS PROFESSORS.

THE slight hope which we encouraged last week of the possible return of a few of the more enlightened homœopathists to rational and scientific medicine has been destroyed by a perusal of the homœopathic literature which has appeared during the week, and by the letters addressed to us by Dr. Wyld and other homœopathists.

The letter which we publish this week from Dr. Wyld confirms our fears that the attempt to bridge over the gulf which exists between us and homœopathists must be indefinitely postponed, if not altogether given up. Last week we were told that "so-called homœopathists have almost entirely abandoned the use of globules, and have substituted doses in a tangible form," and that, "whereas the early homœopathists denounced all auxiliaries in the treatment of disease, it is now the practice to make frequent use of all remedies of a simple kind, such as occasional aperients, anodynes, opiates, anæsthetics, tonics, galvanism, hydropathy, Turkish baths, and mineral waters." "In short," said Dr. Wyld, "we define our practice as rational medicine, including the application of the law of contraries, but *plus* the application of the law of similars." On the strength of these statements we did not hesitate to allege that the belief in the efficacy of infinitesimal doses had been discarded, and the so-called law of "*similia similibus curantur*" repudiated. This week Dr. Wyld affirms that we have misunderstood the spirit and object of his letter, and further states, "I do not disbelieve in the influence of the infinitesimal (*sic*), nor do I abandon the application of the law of similars." Unless this be a mere verbal quibble, we confess ourselves unable to reconcile the utterances of last week and this. We referred to the efficacy of an infinitesimal *dose* (Hahnemann's best dose for all diseases was the decillionth of a grain, numerically expressed by the figure 1 with sixty 0's after it), but Dr. Wyld speaks of the influence of *the infinitesimal*, and appeals to Spallanzani's statement that the millionth of a grain of frog sperm can impregnate the ovum. We fail to discover any similarity between the action of an infinitesimal dose of a drug upon a diseased organism so vast and complicated as the human body, and the operation of a living sperm-cell placed under the most favourable conditions of vitality. Again, if professed homœopathists apply what they designate the so-called law of contraries in their practice, we maintain they have logically repudiated the law of similars. If they profess to believe "*contraria contrariis curantur*," as well as "*similia similibus curantur*," it is evident that they do not believe that diseases are to be cured only by similars, and we are justified in affirming that they repudiate the universality of the homœopathic doctrine. If, therefore, they still retain a name which perpetuates in the public mind an impression that they profess and practise strict homœopathy, or that their practice differs in any essential particular from that of ordinary medical practitioners, they cannot expect, much less claim, to be admitted into our medical societies, and to unrestrained professional intercourse.

The professional amalgamation of homœopathists and the practitioners of rational medicine must be regarded for the present as impossible, unless, perchance, we are ready and willing to accept terms proposed by a writer in the last issue of the *Monthly Homœopathic Review*—namely, to abolish all sectarian names "by the current adoption openly of homœopathy."

AMENDMENT OF THE PENAL CLAUSES OF THE MEDICAL ACT.

IT is satisfactory to find that a deputation of practical men, well acquainted with the defects of the Medical Act and the extensive ramifications of illegal practice, have had an interview with one of the most practical members of the Government—Mr. Cross, who, when a private member of the House, took great interest in questions of medical reform. There were present, Dr. Richardson, Mr. Nelson Hardy, Mr. C. J. C. Pridham, Dr. Rogers, Mr. R. H. S. Carpenter, Mr. Gant, Mr. Hentsch, Dr. Lloyd, Mr. Snell, Dr. Sargeant, and Mr. Chandler. The deputation asked for a clear and effective clause that would make the conviction of illegal and uneducated practitioners a matter of certainty, instead of, as at present, great uncertainty. The first impression of a Minister might be that mere professional reasons and interests moved the deputation to ask such changes in the Medical Act. We shall not affect any mock modesty and say that men who have been subjected to very stringent and costly processes of education and examination before being allowed to practise on Her Majesty's subjects regard with indifference the looseness of law which permits the most unprincipled and ignorant persons with impunity to dupe good citizens under the pretence of doctoring them. But the remarkable evidence adduced by Dr. Rogers and Mr. Carpenter should satisfy the Government that this is not a mere question of professional hardship, but of great public importance. Dr. Rogers showed the large extent to which unqualified assistants are used in Poor-law practice, contrary to the regulations of the Local Government Board, and Mr. Carpenter produced a bundle of certificates of death signed by a druggist's assistant, certifying the cause of death in every case "effusion on the brain." Such a run of "effusion on the brain" would imply either that the writer of the certificate laboured under the disease, or, if real, that it was produced by wrong medicines. In either case, it is a grave scandal that death can be so lightly treated. The case of the demoralising set of quacks was placed clearly before Mr. Cross. These men produce an incalculable amount of misery and mischief, and, by the vilest sort of intimidation, extort such large sums from their victims as make the ordinary fines unimportant to them. Imprisonment is the only fit punishment for this class of offenders. The deputation complained too of the Medical Council for not protecting the public from unqualified practitioners, though it has funds accumulating which it knows not how to use.

Mr. Cross, who has the faculty of seizing hold of questions at their practical point, promised to make inquiries as to magistrates and their difficulties in construing the present law, and to communicate on the whole subject with the Lord President. We are of the number who want to see the Medical Act amended in a thorough way, and not in its mere penal clauses; but the present vague and lax state of these clauses facilitates death and demoralisation, and ought, without delay, to be amended.

"SUNSTROKE."

THE sudden accession of heat has already produced one fatal, and more than one severe, case of sunstroke in the metropolis. Probably the affection so designated is not the malady to which the term *coup de soleil* can be properly applied. The condition brought about is an exaggerated form of the disturbance occasioned by entering too suddenly the "hot" room of a Turkish bath. The skin does not immediately perform its function as an evaporating and, therefore, cooling surface, and an acute febrile state of the organism is established, with a disturbed balance of circula-

tion, and more or less cerebral irritation as a prominent feature of the complaint. Death may suddenly occur at the outset of the complaint, as it has happened in a Turkish bath, where the subject labours under some predisposition to apoplexy, or has a weak or diseased heart. It should suffice to point out the danger and to explain, by way of warning, that although the degrees of heat registered by the thermometer, or the power of the sun's rays, do not seem to suggest especial caution, all sudden changes from a low to a high temperature are attended with danger to weak organisms. The avoidance of undue exercise—for example, persistent trotting or cantering up and down the Row—is an obvious precaution on days marked by a relatively, if not absolutely, high temperature. We direct attention to this matter because it is obvious the peculiar peril of overheating the body by exertion on the first burst of fine weather is not generally realised. It is forgotten that the increased temperature must be measured by the elevation which has recently taken place, not the number of degrees of heat at present recorded. The registered temperature may be more or less than that which occurred a year ago; but its immediate effects on the organism will be determined by the conditions which have preceded it and the violence of the *change*.

THE WAR.

THE enthusiasm of the Russian people in providing means for the relief of the sick and wounded of their army during the war seems rather to increase than diminish. We cannot attempt to enumerate within the space at our disposal the contributions in money (some of large amount) of the different towns and provinces throughout the Empire for this purpose. The great majority of these contributions are destined for the use of the forces in the field, but a part is given, with much foresight, for the special benefit of necessitous families of soldiers on active service. For example, the municipality of Penza has voted 25,000 roubles for the sick and wounded, and 6000 roubles for the assistance of soldiers' families. The nobility of the Government of Penza have, it may also be noted, determined to tax themselves for the sanitary wants of the army, at the rate of 3 copecks for every deciatine of land they hold. This voluntary tax, it is estimated, will produce 34,000 roubles.

The following jottings may be given in further illustration of the marvellous voluntary movement which is now progressing in Russia in aid of its forces in the field. A few days ago, previous to their departure for the seat of war, 35 sisters of charity of the community of Exaltation of the Cross, 26 sisters of the community of St. George, 9 sisters of the community of the Holy Trinity, and 14 women assistant-surgeons, were presented to the Emperor and Empress. Next to the organisation and despatch of Her Majesty's sanitary train, an account of which was given in THE LANCET of June 2nd, an ambulance corps formed by the Evangelical Diaconate in Russia would appear to have excited the greatest attention. This corps consisted of 13 members of the community in St. Petersburg, 4 from Revel, 4 from Riga, and 4 from Mitau, and of 25 volunteer sisters, all under the direction of the Superior of the Deaconesses. The principal medical officer of the corps is Dr. de Mayer, with whom are associated Drs. Peters and Wahl and many young medical men. The corps is destined for Kalaresch, where it will establish for the moment a hospital to be constructed of huts, readily erected and taken to pieces. One party of the deaconesses will be detached to take charge of sick and wounded on the railway between Giurgevo and Yassy, another party will perform a like function on the line of Yassy-Unghen. The sisters will wear a badge on the arm marked with the Red Cross and with the initials "E. D." (Evangelische Diakonie). The departure of this corps from St. Petersburg was witnessed by a great crowd, of which the enthusiasm was raised to a high pitch when the members of the corps, before taking their seats in the train by which they were to travel, sang the hymn "God protect the Czar." Afterwards, while the arrangements for departure were being completed, a chorale was sung. Then, when the train began to move from the station, the deaconesses, amidst the profound emotion of the crowd in the railway station, struck up the hymn "Ein' feste Burg ist unser Gott!" Before the departure of this corps from St. Petersburg it had been received by the Emperor and Empress, and had been thanked by them for its noble devotion.

It is reported that a member of the Merchants' Club offered 25,000 roubles to the Red Cross Society if any other member would contribute 10,000. The offer was accepted at the moment, and the sum of 35,000 roubles at once paid to the credit of the Society. The receipts of the Red Cross Society to the 17th May last amounted to 385,450 roubles.

A Russian decree just issued for the guidance of Russian authorities during the war contains, among other provisions, the following:—"In accordance with the Convention of Geneva of the 10th (22nd) August, 1864, with respect to the sick and wounded soldiers, the commanders of the belligerent armies are to respect the dispositions of this convention, which renders the enemy's hospitals, ambulances, and medical staff inviolable, on the condition of the enemy's reciprocity.—*Note:* When the Turkish Government shall have, with the previous consent of Russia, adopted in place of the Geneva red-cross flag a special distinctive badge for its hospitals and ambulances, the commanders of the belligerent armies will take all the measures necessary to insure the inviolability of establishments and persons placed under the protection of this distinctive badge, in conformity with the Geneva Convention, if the stipulations of the latter are observed by the Ottoman authorities."

VACCINATION AND THE LONDON SCHOOL BOARD.

To the believers in the efficacy of successful primary vaccination as a protection from small-pox, at any rate among infants and children, the fact that the deaths of 722 children under five years of age have occurred in London from small-pox since the commencement of the present epidemic affords conclusive proof of the inefficient administration of vaccination in the metropolis. It may be estimated that these 722 deaths from small-pox represent about 3000 cases of attack among children under five years of age, and signify that 6·5 per 1000 of the 458,893 children estimated now to be living in London at these ages have, during the past twelve months, suffered from small-pox. While there is no reason to doubt that a large proportion of these children had never even been presented for vaccination, there is considerable ground for believing that a certain proportion had been what is called vaccinated, and were registered as successfully vaccinated, although the fact that they did not bear the characteristic marks afforded conclusive evidence to the contrary. The amount of inefficient vaccination disclosed by a medical examination of children in London has before now sufficiently explained the prevalence and fatality of small-pox among children under five years of age, and while the improvement in the quality of primary vaccination is an urgent necessity, it is fully as necessary that systematic steps should be taken to discover and revaccinate those children whom the defects of the present system have left really unprotected, although "vaccinated" in the vulgar acceptation of the word.

Few of the boards of guardians in London have, however,

made any serious attempt to repair the defects of inefficient vaccination. The inspection of children in elementary schools affords one of the most effectual and available means for attaining this end, and it is with great regret we hear that the London School Board have declined to permit such inspection in board schools. Small-pox has been for some months especially prevalent and fatal in Bow and Poplar, and the proportion of cases occurring among children has also been exceptionally large. With a view to remedy the neglect and inefficiency of vaccination the Poplar guardians recently applied to the London School Board for permission to have the children attending the local board schools inspected. The matter was referred to the School Management Committee, who replied that they could not advise that permission should be given for such inspection, as the matter was beyond the jurisdiction of the School Board. It is but too evident that no other measure than the inspection of children in elementary schools is likely to be so effective in discovering those children who are unvaccinated or imperfectly vaccinated, and hence unprotected from small-pox. The timid policy of the London School Board in this matter is therefore to be much deplored. It is possible that their real objection is to the inspection of the children by the Poor-law authorities, and, if so, this difficulty might be met by the London School Board appointing an inspector of their own, who would report from time to time generally upon the health and condition of the children in the board schools, and especially upon the efficiency or otherwise of their vaccination marks.

SESSION AND SEASON.

THE hard work of session and season has now fairly commenced. The House of Commons began its morning sittings on Tuesday last, and it prolongs the ordinary working night until dawn. The candle is burning at both ends. The Lords are settling down seriously to business; and when the Ascot week is over, there will be no respite of energy until the close of the session, which, if the outlook may be trusted, threatens to be long. Besides this industrial consumption of strength in the service of the State, there is the labour of the annual carnival, upon which the comfort of the working population so much depends. A dull season implies poverty and distress to thousands of families who are dependent upon the trade stimulated by the gaiety some shortsighted economists affect to despise. Everything in the shape of comfort for an immense multitude of families through the summer and next winter rests on the issue whether the season is "gay." It is therefore no mere pleasantry to express the hope that nothing may occur to cloud over the prospect. Meanwhile all this activity calls for caution with regard to health. Each year lives are blighted and constitutions ruined because wisdom is forgotten in the revel of enjoyment. Heated rooms, reckless exposure, excessive exertion, injudicious dressing, drinking, and feeding, work irreparable mischief in systems not especially strong. The perils which beset society in these respects have been so repeatedly pointed out that it is not worth while to recount them. Meanwhile the moment is opportune for a special caution. The long prelude of rain and changeful weather which ushered in the summer scattered the seeds of disease broadcast. More than common prudence will be necessary to avoid the development of a crop of evil consequences. Attention should be especially directed to chest and throat affections, and every means taken to escape the avoidable perils of weather during the whirl of excitement and the pressure of worry and work. Members of the Lower House of Parliament, and those who frequent crowded assemblies breaking up at late hours, will be exposed not only to sudden and great changes of temperature, but to the vapours rising from ground long saturated by a heavy rainfall, and imperfectly dried. London is not worse placed than other districts in this respect; but during the height of the summer season it is crowded with a dense population peculiarly sensitive to climatic influences; and it is right to say that special care will probably be necessary to avoid mischievous results during the season on which we have now fairly entered, when the stamina of young and weak constitutions is likely to be severely tried.

THE ALLEGED STARVATION CASE (ISLE OF WIGHT).

THE Local Government Board has, with considerable promptitude, completed the official process of justification in the case to which we adverted last week. Our readers will remember it related to a workhouse with only one water-bed which is "beyond repair," and where one female nurse takes charge of thirty-four patients. We pointed out that the condition of matters at the Isle of Wight pauper establishment must be deplorably inefficient, and for the tolerance of this evil the Local Government Board is responsible to public opinion inasmuch as it has assumed the administration of the Poor-law system, a task for which it is apparently incompetent. We remarked that it would be interesting to see how the Board distributed among its subordinates and officials the blame arising out of the death of an idiot from starvation. The Board is unable to shake off the incubus of the verdict returned by a coroner's jury, and admits that the deceased died from starvation. The individuals sacrificed to public opinion are then named. Two nurses are discharged, including, of course, the woman who would not, or could not, give efficient attention to thirty-four patients. The master is "censured," the medical officer requested to resign, and his deputy disqualified from again acting in a similar capacity. The guardians are not offended by any unpleasant proceedings, and the Local Government Board neither exculpates nor condemns its own inspectors. It is not explained how a workhouse has been so ill-provided and badly conducted, or on what grounds of humanity, or pretence of justice, an idiot came to be placed in an institution of the class instead of being sent to a special asylum! It would be manifestly impossible for the central authority at Whitehall to deal with these vital points without avowing its own inefficiency, and confessing the supervision it affects to exercise an empty sham. We think the matter requires the intervention of the Legislature, and we trust the ineffectual nature of the Poor-law administration carried on by the Local Government Board will, at an early opportunity, receive the practical attention it deserves.

A HEALTH REPORT.

MR. ALFRED HAVILAND, medical officer of health to the Northamptonshire combination of sanitary authorities, has recently prepared a very useful and interesting map and memoranda in connexion with the sanitary condition, geology, vital statistics, &c., of Oundle, in Northamptonshire, for the use of Mr. Simon, who has been requested by the Grocers' Company to report upon the eligibility of this town as a site for the erection of considerable additions to the Grammar School buildings. The map is most elaborately prepared, and the entire subject appears to be treated exhaustively, being supplemented by a report from Professor Attfield on eight well waters used in the district for drinking purposes. Mr. Haviland recommends, as a result, the extirpation of all old drains, cesspools, &c., with several feet of soil in their neighbourhood, the removal of all old building material, concrete foundations to the new school, a supply of water brought from without the precincts of the

town, a prohibition as to all sewage entering the town drains, and the adoption throughout the town of the dry method of sewage disposal.

These recommendations are made on account of some somewhat exceptional peculiarities. Oundle is almost entirely surrounded by the river Nene, into which, however, the sewage cannot be projected. Some years ago drains were laid throughout the town for surface and storm waters, these drains being uncemented and loosely put together, so that their contents freely percolate into the rock above and below them. In spite of legal prohibitions there is no doubt that a great deal of sewage finds its way into these drains, and that, as a consequence, although the air of the houses may not be polluted by sewer-gas, the water-supply derived from wells must be much contaminated. Mr. Haviland shows, in a summary of statistics, that Oundle with its present population must yield annually 488 tons of manure, which are first deposited in 218 privies, with cesspits and illicit watercloseta. Where does this filth go? The reply of the author is, "By far the larger portion remains behind—i. e., in a highly porous soil, ready at any time to pollute a well," though, thanks to the faulty construction of the drains, its gases are not forced up into the houses.

POISONING BY SANTONIN.

PROF. BINZ, of Bonn, has just recorded an interesting and important case of poisoning by santonin, which came under his observation two years ago. The patient was a delicate child, twenty-five months old, who about 6 A.M. took two lozenges, each containing ·025 milligramme of this drug. At 4 P.M., without any previous warning, sudden clonic convulsive spasms set in, commencing at the left angle of the mouth, and thence spreading over the left side of the face. These were succeeded by similar spasms in the right arm, beginning in the fingers. A quarter of an hour after, a tonic spasm invaded the left side of the face and left arm, then rapidly disappeared, leaving a fibrillary twitching of the muscles of the left angle of the mouth and left eyelid, which soon afterwards ceased quite suddenly. Two more convulsive attacks occurred on the same evening, and in one the respiratory movements threatened to come to a standstill, although the heart was beating quite strongly and the pulse was normal. Two or three similar fits occurred daily at intervals for the next four or five days, after which the child was as well as before. During this time the urine was of the peculiar greenish-yellow colour which has been noticed after the exhibition of this drug. Professor Binz suggests that the localisation of the convulsive spasms on the left side of the face was due to its being smaller and less developed than the right side, thus making it "a place of less resistance." As santonin is not included among poisons in works on forensic medicine, the best treatment of such a case is a question of much importance, and to decide this, as well as its physiological action, some experimental investigations were made on cats, rabbits, and frogs. Professor Binz injected weak solutions of santonate of soda in water, and found that the mesocephalon was first attacked, and that the convulsions principally affected the muscles supplied by the third, fourth, fifth, sixth, and seventh cranial nerves. The spinal cord and the general muscular system were afterwards involved. There was no disturbance of the heart's action or of the blood-pressure. Numerous observers have already described the peculiar effect of santonin on vision, causing objects to appear yellow or green. Nitrite of amyl, morphia, and artificial respiration were powerless against the spasms, although the latter must be employed to ward off asphyxia from paralysis of the diaphragm. Ether and chloroform arrested the attacks if given at their very commencement, and always lessened their severity and duration. Hypodermic injections of chloral hydrate had much the same effect, so that we have in these agents very powerful physiological antidotes against the action of the poison, whilst we wait for its elimination.

The extremely prevalent use of santonin as a vermicide by the profession, and its common sale in worm powders and worm lozenges by every druggist, make the above case and observations of more than ordinary significance. Its occasional toxic action on the cerebrum has been noticed before, and referred to by several writers; but that it could induce such severe symptoms was not generally known, and it now behoves us to give the drug with more precision, and to watch its effects with more care, than has been the usual custom. The quantity taken in this instance—viz., a mere fraction of a grain—seems very small to have produced such a serious result; but as the child has never suffered from any convulsive symptom before or since, and as the urine was so evidently coloured by the drug, we must either suppose that there was an unusual susceptibility to its action, or, more probably, that by some mistake the dose was much larger than was inferred from the lozenges that were analysed. The effects on the lower animals prove its toxic power, and leave no doubt as to the necessity of our using the remedy much more sparingly than we do at present; and we are at least bound to take some trouble to ascertain the probable presence of worms in a child's alimentary canal before administering a medicine which may occasionally even act as a poison.

REVIVAL OF MEDICAL PUPILAGE.

NOBODY would like to revive the old system of five years' apprenticeship by which largely apothecaries were made. It too often took the form of wasted time, and undignified occupation and want of occupation. But there has been a very general feeling in the profession that it was too absolutely abolished, and that there is a want in the education of medical students of some teaching in the great practical work of the care of patients. Sir J. Paget has lately told us that he got his first course of histology, more than forty years ago, in a small village in Norfolk of 1200 inhabitants, and that there are many such opportunities now; and that if he had to choose where to send his son with a view to entering the profession, he would apprentice him for the first year to a practitioner in the country. We do not begrudge practitioners in the country this not undeserved compliment, and we hope it will lead to a revival of the interest of country practitioners, whether connected with hospitals or otherwise, in the medical education of students. There are many practitioners in both town and country who can give first lessons in anatomy, or even histology, but there are many more who can give admirable lessons in "the care of patients"—that undefinable and comprehensive expression which is one of the too few good things which we owe to the long and badly managed meeting of the General Medical Council just over. The Council recommends—"That candidates for the final professional examination be required to give evidence that they have had opportunities of practical study, with care of patients as pupil, assistant, clinical clerk, or dresser in hospital, dispensary, or elsewhere." It is for the examining bodies to give shape and form to this somewhat vague but excellent resolution. Practical study, with care of patients, may be had in various ways, but without it medical education is sadly incomplete, and the student is launched into the responsibilities and delicacies of practice unprepared. It is rather to be learnt in dispensary practice and in private practice than in hospital. The word "assistant" in the above resolution would be better deleted. The essential thing is that the student should put

himself into a pupillary relation in which he may reasonably claim to be taught the treatment of cases of common disease and "the care of patients"—the pupilage to last, not five years, but six months.

WORKMEN ON THE "SWEATING" SYSTEM.

We are glad to note that the agitation against the home work and "sweating" system is gaining ground, not merely among sanitary reformers, but among those who are more intimately connected with the grievance—namely, the workmen themselves. An important conference, convoked by the Leeds District Trades Council, has just been held, and resolutions passed, corresponding with the advice given by our special commissioners in their Report which originated the present movement. Representatives of twenty-two different trades attended the conference, and voted unanimously that the "sweating" system ought to be subjected to both imperial and local legislation. The conference held that it was "the duty of manufacturers to provide workshop accommodation for those they employ"; but when this is not the case, those parts of private dwellings where work such as tailoring is done "should be deemed a workshop, and registered and inspected under the Factories and Workshops Consolidation Bill now before Parliament." Such is the policy advocated by the trades-unionists of one of the most important manufacturing districts in England, and these resolutions were enforced by many telling arguments. Mr. Bailey, the President of the Amalgamated Society of Tailors, had been personally acquainted with a family of nine or ten tailors living in one small room, where they used three sewing machines, cooked their meals, and covered their beds with the clothes they were making. Cases were also mentioned of disease having been conveyed from such quarters, not merely to the wearer but to the employer of the person who made the clothing. We may therefore conclude that the working classes are not altogether ignorant of the dangers they incur, and that they also understand the necessity of giving the authorities sufficient power to quell the evil. If more conferences of this description were held, there would be less fear entertained of compromising the liberty of the subject by wise protective legislation, and more hope of delivering the population from the incessant risk of contagion.

MILK SUPPLY AND ENTERIC FEVER.

Some three weeks ago Dr. Stevenson brought before the Society of Medical Officers of Health particulars as to a certain epidemic of enteric fever which, according to the theory of the speaker, had been caused by the milk supply. It appeared to us that the evidence in support of the theory was, in this case, somewhat weak, and at all events demanded additional investigation. But it seemed good to Dr. Tidy to denounce this source of typhoid as a "fashion" that had been much overridden. According to Dr. Tidy the journals were continually harping upon milk and typhoid, and nearly every epidemic was referred to the milk-pail. These observations were, as might have been expected, criticised very considerably. But Dr. Buchanan, the President of the Society, stated, in effect, that during the last seven years he had collected in his official "pigeon-holes" at Whitehall particulars and reports of no less than two hundred epidemics of enteric fever; of these fourteen only were attributed to milk, and from this latter number he had deducted seven on the score of insufficient evidence. It is dangerous to make general statements not backed by exact statistical details. And the observations came ungracefully from Dr. Ballard's successor.

ELECTIONS AT THE ROYAL COLLEGE OF SURGEONS.

The forthcoming election of three Fellows into the Council of the Royal College of Surgeons of England, notices of which have recently been issued, promises to be of more than usual interest. The three vacancies are caused by the retirement by rotation of Mr. John Gay and Mr. Erichsen, and by the decease of Sir William Fergusson, whose term of office would have expired this year. As both Mr. Gay and Mr. Erichsen have consented to offer themselves for re-election, the chief business will be to find a worthy successor to the late distinguished surgeon, whose high professional standing and practical wisdom did much to give shape and character to the deliberations of the Council. Great responsibility will rest upon the Fellows in making a selection. We believe that Mr. Savory, of St. Bartholomew's Hospital, and Mr. Timothy Holmes, of St. George's Hospital, are candidates, although it is scarcely likely that they will both contest the seat.

THE OMISSION OF HONOURS.

The *London Gazette* has lately contained two important notifications of additions to the ranks of the order of the Bath and St. Michael and St. George. The honour of knighthood has been conferred on one naval medical officer, Dr. Smart, Inspector General of Hospitals and Fleets, but not a single army medical officer has been considered worthy of the honour. The order of St. Michael and St. George, particularly destined to honour such of her Majesty's subjects as have distinguished themselves in the colonies, contains not one medical name. There are several lawyers of course, and officers of the Engineers and Artillery, and, properly, the names of several civil engineers of eminence. But we can scarcely suppose it would have been very difficult, surely not impossible, to have found at least one eminent physician or surgeon to include in the list. This persistent denial of honours to our profession is becoming so marked as to call for notice. As we remarked on the publication of the *Gazette* to the Star of India, noticeable also for its total omission of medical names, we have no intention to impute this neglect of our profession to the fountain of all honour, Her Most Gracious Majesty, but to the responsible advisers of the Crown, who seem to have forgotten that such a profession as medicine still exists. The healing art is not so greedy of honours or seats in high places as the law or the church, but it is somewhat hard that it should be totally excluded from the honours and decorations its members would prize as highly as any other public servants of the country.

PRISONS IN SCOTLAND.

The forty-first report of the Inspectors of Prisons in Great Britain gives a very unsatisfactory account of the arrangements of some of these establishments in Scotland. The Glasgow prison is stated to be "most fearfully overcrowded." Many of the cells are described as being quite unfit for the confinement of even one prisoner. The nominal accommodation is for 616 persons, but as many as 1152 have been confined in the cells at the same time. At Hamilton, fifty male prisoners have, during the past year, been confined in twenty-three small ill-ventilated cells. As many as eighty-eight persons have been confined in forty-two small cells at Airdrie. At Greenock, the ventilation is described as "very indifferent" (which means, we suspect, very bad), but 114 prisoners have been accommodated in sixty cells; and at Pollockshaw prison, four cells have sufficed for thirteen prisoners. The Inspectors remark significantly that "no epidemic has occurred in any prison throughout the dis-

trict." Will Mr. Cross wait for one before providing these people with a little more oxygen and a little less carbonic acid?

DWELLINGS FOR THE WORKING CLASSES.

THE second report of the Metropolitan Artisans and Labourers' Dwellings Association has just been issued, from which it appears that the Association has already purchased two sites severally as Battersea and in the neighbourhood of King's-cross, on the former of which two labourers' blocks containing 156 rooms, and one artisans' block with 304 rooms, in 98 tenements, have already been erected. The labourers' tenements are in one or two rooms each, and the large majority are already occupied. The building will be formally opened at an early date by Lord Beaconsfield. Her Majesty has approved of the proposal to change the name of the Association, which will be called henceforth the Victoria Dwellings Association. The chairman of the council is Mr. John Walter, M.P., and with such practical men upon it as Sir James Paget, Mr. Thomas Brassey, M.P., Mr. John Penn, jun., Sir Thomas Fairbairn, and Mr. Lucas, the work of the Association ought to be steady, progressive, and successful.

THE PRINCESS OF WALES.

THOSE persons who live by gossip have been busying themselves with the health of the Princess of Wales, and spreading needless alarm by giving utterance to rumours which we are happy to state are entirely without foundation. Before leaving for Greece, her Royal Highness had been suffering from cold, and had been obliged to forego the fatigue which is inseparable from State ceremonials. The unusually inclement weather of the past month or so rendered it most unadvisable that the Princess should exchange the warmth of Greece for our bitter east winds and frost. Now, however, that our climate has become more genial, we have the pleasure of welcoming her back, and strong enough to perform the journey from Brindisi to Paris without break, and from Paris to London between midnight and 8 A.M.

SANITARY REPORTS.

IF the practical wisdom of local sanitary authorities were measured by the elaborate style and profuse liberality displayed in the periodical reports published, the corporation of Portsmouth would rank high in the scale, although from recent events, that borough does not appear to have distinguished itself greatly in matters relating to public health. The energy and ability of Mr. George Turner have resulted in the production of a very valuable, as well as ornamental, report as to the events of the past year, the most conspicuous of which was a severe epidemic of scarlet fever, which, during seventeen months, killed 482 persons. A "tracing" is given, showing the position and order in which fatal cases of scarlet fever occurred during the epidemic. It is calculated that about 4000 cases occurred, and the burden of the report is here, as elsewhere, the absence of a hospital for infectious diseases, and the unwillingness of the authorities to provide it. The diarrhœa of children, as influenced by the mode of feeding generally adopted, is treated in a painstaking manner, and typhoid, of course, comes in for some special notice. A great deal of care is evidently taken in this district to supervise properly the food supplies, and it is impossible to overrate the importance of this subject considered in reference to the direct prevention of disease.

We are always glad to receive and to notice any sanitary reports that may be sent to us from the United States. We have lately received the last annual record of the Board of Health of the City and Port of Philadelphia, and have specially to comment upon the admirably systematic way in which the lazaretto and quarantine arrangements are administered. During the year under consideration it appears that no less than 1295 vessels and 10,178 passengers were examined on arrival in the port. Under a special resolution of the Board of Health 14 vessels were detained at the station, and subjected to rigid quarantine regulations before being permitted to proceed to the city. It would be well to know exactly in a future report what these quarantine regulations are.

DEATH FROM CHLOROFORM.

A PATIENT who was about to submit to an operation for perineal fistula died while under the effects of chloroform recently at the Blackburn Infirmary. There was nothing unusual in the case, and the post-mortem appearances were those of asphyxia. The case resembled many others in this, that death ensued quickly on the stage of struggling. We have often, when commenting on these cases, taken occasion to call attention to the danger which attends this stage of chloroform narcosis, when, owing to the rigid state of the muscles of respiration, the dangers of asphyxia are superadded to those which are inseparable from the use of chloroform. Whenever tonic muscular contraction ensues, the administrator should cease giving the anæsthetic, and watch the patient narrowly. The tonic muscular contraction is never of long duration, and its appearance is usually a sign that the patient, though unsteady, is nevertheless powerfully under the influence of the drug.

THE ARCTIC EXPEDITION.

IT would appear that the House of Commons has not yet exhausted its interest in the sanitary details of this expedition, as furnished very completely by Sir James Hope's committee. Yet another question was asked on Monday night by Dr. Lyon Playfair. The reply given by Mr. Egerton, in the absence of the First Lord of the Admiralty, being considered fragmentary and unsatisfactory, Dr. Playfair at once gave notice that he should "call attention to the report on the motion for going into Committee of Supply." The honourable member has, therefore, now succeeded in securing a proper and legitimate opportunity for a discussion of the subject by the House. Hitherto questions have been asked and answered, the information obtained not being always complete or assuring. But inasmuch as this is not a political question, and had exercised the sympathies of all who care for our prestige and prosperity as a nation, there can be little doubt that the motion will result in a large amount of instructive and salutary discussion.

THE EMPLOYMENT OF ELECTRICITY IN INFLAMMATION.

G. E. WEISFLOG has recently recommended the use of faradaic currents of electricity in the treatment of traumatic inflammation. He maintains that it possesses well-marked antiphlogistic powers, that it alleviates pain, and that it effects the absorption of inflammatory products, whether these are of a serous, purulent, or sanguinolent nature. The affected limb is most advantageously immersed in a water-bath, the temperature of which may vary considerably, in some instances rising as high as 100° F., into which one electrode of the apparatus is immersed; the other electrode must be applied to some healthy part of the body. He speaks of having obtained successful results in various cases of phagedænic ulcers, burns, acute and chronic joint affections, and pleurisy; whilst faradaic currents will also cure iritis, keratitis, &c.

EXCEPTIONAL FATALITY FROM DIPHTHERIA.

IT is reported that an hotel-keeper at Ellesmere (Salop) has recently lost the whole of his family of six children from an exceptionally fatal form of diphtheria. It is said that about three weeks ago the children were at Duddleston, and, being thirsty, were supplied with water to drink from a cottage in which it now appears a child was suffering from diphtheria. The outbreak of the disease, to which the whole family rapidly fell victims, is traced to this circumstance, and should the supposition be well founded, it would go far to prove that the diphtheritic poison, like the germs of typhoid fever, can be distributed in water, evidence in which direction appears to be also afforded by the epidemic of diphtheria in Bromley (Kent).

A CORPORATION HOSPITAL FOR PAYING PATIENTS.

THE Corporation of Otago is, it appears, the proprietor of a hospital, to which payment is made by patients or their friends, on stated terms. An interesting trial has just taken place which shows that the Corporation entertains remarkable views and a very niggardly spirit in providing nurses. A child, ill of scarlet fever and delirious, fell out of bed. It transpired that there was no night nurse, and, in fact, no nurse at all but for convalescent children! The father of the child brought an action against the City Corporation for having negligently and improperly kept, tended, and nursed his children (there were others), and judgment was given in his favour by Mr. Mansford. Most properly so.

VENTILATION OF SHIPS.

THE Shipwrights' Company opened on the 28th ult., at the Fishmongers' Hall, a very interesting exhibition of nautical models of all kinds, as well as of many appliances calculated to insure safety at sea, or on inland waters. We took occasion, some few days ago, to look over this exhibition, and it was humiliating to note that sanitary science afloat is eminently conspicuous by its absence. This exhibition was originated, in fact, to display only excellences of naval architecture. But all kinds of varieties have been imported. There are lifeboats and other appliances for saving life; indeed, as it seemed to us, all sorts of science afloat, except sanitary science, is well represented. We commend this fact to the attention of naval medical officers and port medical officers of health, the latter of whom have specially good opportunities for promoting, directly or indirectly, the sanitary safety of soldiers, sailors, and civilians at sea.

THE POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

AT a Council meeting, held on Tuesday, the 5th instant, it was resolved that it was expedient to postpone the Annual General Meeting of the Association from Thursday, the 21st June, as previously announced, to Tuesday, July 3rd. The meeting will be held at 3, Bolt-court, Fleet-street, at 3 P.M. precisely, when several matters of much interest to the Poor-law Medical Service will be brought under consideration. The Council therefore hopes that all members and friends of the Association will make it convenient to attend.

NE SUTOR.

"To speak is silver, and to be silent is gold" must be the reflection of Temple Bey, who has been shipped off promptly to Batoum for telling the Sultan that the shells with which the Turkish empire is being defended contain no powder. A professor of the healing art ought not to aspire to a knowledge of lethal weapons. Such is evidently the opinion of the Turkish Minister of War, who has enforced this lesson upon our unfortunate compatriot with characteristic severity. We hope the Sultan will reward Dr. Temple for thus speaking the truth, and will see the wisdom of treating mercifully the nephew of our most liberal Bishop, who probably has a good word even for "Turks, infidels, and heretics."

EPSOM COLLEGE.

WE understand that a large meeting of old Epsomians was held on Saturday, June 2nd, at St. James's Hall, and that it was unanimously agreed to form a club for the purpose of occasional meeting, the rules of which were drawn out and the officers appointed. About forty have already enrolled themselves as original members; and the first meeting, of which there are to be three annually, will be held in July next. It is confidently expected that many more will join the club before that date.

AT the end of last year there were under restraint in the various asylums and workhouses in Ireland 12,123 persons, being an increase of 346 over the number under detention at the close of 1875. Almost exactly one-half of these were females, and, allowing for the number of insane at large, the percentage of lunatics to the population was about 3½ per 1000. The various workhouses contained 3216 lunatics, of whom 1429 were hopelessly demented, the remaining 1787 being either idiots, imbeciles, or epileptics. As regards recoveries, about one-fourth on an average are cured; the earlier the cases come under treatment the greater the chance of recovery.

THE following distinguished savans have, it is announced, been elected foreign members of the Linnæan Society:—Pierre Duchaitre, of Paris, distinguished for his researches in physiological and other branches of botany; Professor Carl Gegenbaur, of Heidelberg, whose labours in zoology and comparative anatomy of the vertebrates and invertebrates are acknowledged to be of the highest value; Prof. Rudolph Leuckardt, of Leipsic, to whose investigations into the morphology and physiology of the lower forms of animals, and the establishment of the group Cœlenterata, all working zoologists are indebted.

THE death of Sir Henry Pelly, M.P., which occurred suddenly on Monday last, the hon. baronet being seized with illness while on horseback, was not, as at first supposed, due to "sunstroke." Cerebral hæmorrhage is now stated to have been the proximate cause; renal and, we presume, arterial disease having been previously recognised. We have elsewhere called attention to the fact that cases popularly ascribed to "sunstroke" are generally only contingent on the heat, and, in fact, occurrences in the course of pre-existing disease.

A PRESENTATION of a very handsome service of plate has just been made to Dr. Hassall, the Right Honourable Lord Eversley and Sir Lawrence Peel having been the treasurers of the fund. The tray bears the following inscription: "This silver tray, with the tea and coffee service, and 300 guineas, were presented to Dr. Arthur Hill Hassall by a numerous body of contributors, in recognition of his valuable services as the originator and founder of the Royal National Hospital for Consumption and Diseases of the Chest, located at Ventnor."

IT will be a source of much pleasure to Dr. Habershon's many friends to learn that he is now rapidly convalescing from his recent severe illness.

DR. PEACOCK has resigned the office of physician at St. Thomas's Hospital, and Dr. Ord, at present assistant-physician is a candidate for the vacant post. Dr. Greenfield is a candidate for the assistancy. Both gentlemen are eminently qualified for the positions they seek. Dr. Greenfield's former connexion with the hospital and school, as Pathologist and Lecturer on Morbid Anatomy, gives him a special claim, which, in professional circles, will be warmly recognised.

REPORT
OF
The Lancet Special Commission
ON
PUBLIC HYGIENE IN PARIS.

No. IV.

BEFORE considering the water-supply of Paris, we are anxious to trace the recent history of a street to which we alluded in our first report as presenting some typical features. We were taken to a dirty second-hand furniture shop where a fatal case of diphtheria had occurred. Three children remained in the house, and at our last visit we found that one had since died of diphtheria, while another was laid up with typhoid. Yet no sanitary authority had interfered, and absolutely nothing in the way of disinfection had been attempted. It is not surprising that a small epidemic should have raged in this unfortunate street. At No. 11, just opposite the house referred to, three children died of diphtheria in one apartment, and two other cases in another lodging, one ending fatally. At No. 12 there was a case of typhoid, at No. 18 a death from diphtheria, and at No. 2 a third case of typhoid. Another case was brought to our notice, which is not less instructive than the preceding. Six journeymen bakers slept in a single room over the shop. Three of them in turn were seized with typhoid fever; yet the others, though in actual and continual contact with the fever patients, were suffered to pursue their daily work and to distribute bread with hands that may well have been deadly in their touch.

All this is so obviously wrong that no comment upon it is necessary. But, after all, there seems but little chance of improvement while the hospitals themselves set so fatal an example of sanitary neglect. To our former remarks on this head we may add some figures which have since come into our possession and more than confirm our statement. During the second quarter of last year 9 cases of measles occurred in the Hôpital des Enfants Malades, of which 6 originated in the hospital. Out of 44 cases treated by M. Labric, 19 came from outside, 12 originated in the surgical wards, and 13 in other parts of the hospital. The isolation of small-pox cases has, however, at last been partially effected, and the result is that of 283 cases only 6 originated in the hospital; while at the Val-de-Grâce, where small-pox patients are still admitted with others, and without isolation, 15 out of 40 patients, or no less than 37·5 per cent. of the whole, contracted the disease in the building.

We now turn to the water-supply of Paris, to the deficiencies of which much of the zymotic disease of the city is, we believe, to be ascribed. In an interesting work by M. Figuier, quoted at some length in the *Journal d'Hygiène*, a sketch is given of the past and present condition of the water-supply. The first systematic supply was provided by the Romans, who, with their usual energy, built two aqueducts from the outlying villages of Arcueil and Rungis. Under Philip Augustus the waters of Pres St. Gervais were utilised. Henri IV., Louis XIII., and other rulers effected further improvements in the short intervals of peace. In 1782, steam engines were for the first time employed at Chaillot, and it appears that at this time the population of Paris was 600,000, and the daily water-supply 14 litres (about 3 gallons) per head. This very insufficient supply was rapidly increased, and in 1861 it amounted to 150,000 cubic metres (about 33,000,000 gallons) per diem. But the water was all obtained from the immediate neighbourhood of the capital, and the quality was bad, and getting worse. The necessity of some complete change was seen by M. Haussmann in 1854, and in 1859 the Municipal Council adopted a scheme which would, if carried out, have provided the city with an abundant and excellent supply. The opposition was, however, strong, and as other difficulties arose, the only new sources utilised were the basins of the Vanne and the Dhuis; but even this was a great work, and a welcome success.

At Montsouris, on an elevation of 111 metres, an immense reservoir receives the pure water collected from the valley of the Vanne, and transmits it by an aqueduct to Paris. This water, derived from the chalky soil of the province of Champagne, is limpid, fresh, and agreeable, and its temperature seldom exceeds 42° F. Even during the drier weather these springs can supply 87,000 cubic metres, or about nineteen million gallons, of water per day. On the opposite, or north side of Paris, at Menilmontant, a reservoir receives the waters of the Dhuis, which are drawn from a little valley near the village of Paryny. The aqueduct recently built for this purpose is 130 kilometres long. Its form is that of an ovoid cylinder, 1 metre 76 inches high, and 1 metre 40 inches wide, built in simple masonry, and covered with a thickness of 20 centimetres of cement. This water is a little more calcareous than that of the Seine; its temperature is not above 42° F. in summer; its taste is good, though inferior to that of the Vanne. The reservoir receives 33,000 cubic metres (rather more than seven million gallons) of water per day, and the water, according to M. Poggiale's analysis, contains 29·40 cubic centimetres of carbonic acid gas free, or as bicarbonates, per 1000 litres of water—14·78 c.c. of nitrogen, and 5 c.c. of oxygen. The solids, per 1000 grammes of water, are estimated as follows:—

	Grammes.
Carbonate of lime	0·209
Carbonate of magnesia, soda, iron, alumina...	0·036
Sulphate of lime	0·001
Chloride of sodium	0·009
Nitrates of lime and potash	0·013
Silicate (alkaline)...	0·014
Ammonia	0·000
Alkaline, iodide, and organic matter	traces
Water combined and lost	0·011
Total	0·293

Equal to 20·5 grains per gallon.

It is impossible from these figures to judge with certainty of the quality of the water for drinking purposes. The French chemists are far behind our own in water analysis. But it is probable that the water, though somewhat hard, is pretty free from recent organic pollution, and if the quantity were commensurate with the quality there would be no substantial fault to find. But, unfortunately, this is not the case. The two pure sources taken together only yield 120,000 cubic metres per diem, and as the population of Paris at the last census was 1,851,792, the daily supply of drinkable water is not more than 65 litres (or 14 gallons) per head. Such a supply is wholly inadequate to the wants of modern civilisation, and it is therefore chiefly supplemented by the abundant but very bad waters of the Marne and Seine. The latter of these is, as we have before remarked, polluted with sewage in a frightful manner, and although it is asserted that only the good water is supplied for domestic purposes, it appears certain that the diluted sewage known as Seine water does frequently, if not always, find its way into the domestic supply. The more or less polluted waters which supplement the pure upply are estimated as not less than 335,000 cubic metres per diem, so that the total daily supply, even allowing liberally for waste, is as much as 232 litres (or 51 gallons) per head. London only uses 30 gallons; but then Paris

requires and receives more watering than London, and it must be remembered that the London water, though by no means as good as it should be, is yet excellent as compared with the foul waters of the Seine and Marne.

The excessive pollution of these streams is easily accounted for. It is due partly to the refuse of noxious manufactures and partly to actual sewage derived from the islands of Paris and St. Louis in the centre of the town, and from various sewers. Its extent is best demonstrated by the experiments made by M. Felix Boudet and M. Girardin in August, September, and October, 1874. Before approaching Paris—that is, beyond Corbeil—a litre of Seine water contained on an average 9·32 cubic centimetres of oxygen. At the Auteuil Viaduct—that is to say, after passing through the centre of the town—this proportion was reduced to 5·99 cubic centimetres. The Seine then twists northwards, towards Asnières, where the main sewer joins the river, and immediately the proportion of oxygen falls as low as 1·75 cubic centimetres, and even this is further reduced to 1·02 cubic centimetres after passing the northern sewer or collector of St. Denis! The sewage-matter is gradually dispersed as the river rolls on to the sea, a great portion sinking into the mud, or adhering to either bank, where it engenders fever when in the dry season the water falls below its ordinary level. At last, after a journey of 150 kilometres, the abnormal proportion of oxygen is restored, and at Vernon it amounts to 10·42 cubic centimetres. Near Asnières, however, the water is so far poisoned that on several occasions all the fish have been killed, to the utter consternation of the innumerable pleasure-seekers who visit these suburbs to eat fried gudgeon on holidays.

Similar experiments have proved that the Bièvre, a little river reaching Paris from the south, is so corrupted by the industries established on its banks, that in some parts the water possesses absolutely no trace of oxygen. Indeed the stench is here so obnoxious, and has caused so much sickness, that a part of the rivulet is covered and converted into a sewer. But this precaution does not suffice; gases, containing about six per cent. of sulphuretted hydrogen, escape from the uncovered portion of the stream, and its water is strongly impregnated with ammonia.

There can be little doubt that the epidemic of typhoid fever which recently proved so fatal in Paris was in a great measure to be attributed to the pollution of the water-courses that pass through, under, or near the town. The exceptional dryness of last summer caused all water to fall below its ordinary level, and the fermentation of the organic matter exposed by being left on the banks helped to corrupt the air and engender disease. This explanation, at least, is supported by no less an authority than Dr. Ernest Besnier.

Altogether, therefore, and at any sacrifice, Parisians must cease drinking Paris water. The supplies from the Vanne and Dhuis, or other similar and distant sources, must be augmented. Taken from the spring and brought to Paris through a covered conduit, these waters are probably free from serious contamination; and, when a sufficient quantity is obtained, Paris will be better off in this matter than some even of the more fortunate towns of Europe.

Happily, Paris is not without its sanitary reformers. Dr. Ernest Besnier is indefatigable in urging the necessity of sanitary supervision. Dr. Pietra Santa, through the columns of his *Journal d'Hygiène*, popularises sanitary science. Dr. Passant is the earnest advocate of reform in the treatment of the indigent sick. Dr. Du Mesnil is striving to promote the more effective supervision of common lodging-houses and unwholesome dwellings. Dr. B. Ball, and the Société Nationale des Amis de l'Enfance, are active in propagating practical knowledge in the art of rearing infants. Dr. Worms is seeking to improve the method of registering deaths, diseases, and meteorological phenomena. While Dr. Ch. Lasègue, Dr. Delpech, and many other of the leaders of the medical profession in France, are, in their several spheres, helping to render Paris as perfect in its sanitary government as it is beautiful in its outward aspect.

MR. JOHN THORP has obtained a superannuation allowance of £50 per annum upon resigning as medical officer for the All Saints District of the Maldon Union, Essex.

THE RADCLIFFE INFIRMARY.

FEW of the older hospitals in this kingdom are so interesting to the student of hospital construction and arrangement as the Radcliffe Infirmary, Oxford. It presents a remarkable illustration of what may be done by adaptation and additions to convert an old and, according to modern notions, ill-designed building into an excellent hospital, with the least disturbance of the original structure, but with the closest regard to modern requirements. The various works by which this change has been wrought were brought to an end, it may be said, last week, by the completion of detached wards for young children, and of an isolation block for infectious diseases, and on Saturday last these new structures were formally opened for use by H.R.H. Prince Leopold, K.G., himself a trustee of the infirmary, and at his request one of the blocks of building was named (after the Queen) the Victoria Wards, the other (after the Princess of Wales) the Alexandra Wards. It had been proposed that the ceremony of opening should have taken place in the wards themselves, but in deference to the wishes of Sir Wm. Jenner, in regard to the safety of Prince Leopold, several cases of scarlet fever being under treatment in the portion of the building which, up to the present, has been used for fever cases, the ceremony was adjourned elsewhere, and, in fact, took place in the great lecture theatre of the University Museum. An interesting report of the different alterations made in the infirmary since 1850 was read at the meeting, held in the Museum, for the purpose of opening the lately added wards. These consisted in the erection of the well-known and unsurpassed out-patients' department, and of the noble accident ward, the establishment of a laboratory, the re-construction of the ward offices and drainage, the building of a new block for medical cases and of a new laundry, the provision of a nurses' home, and, lastly, the building of wards for young children and of a special isolation block for infectious diseases. The cost of all these changes and additions has been defrayed by private liberality. The children's wards just opened are the gift of a lady, Mrs. Combe, whose husband had previously erected the handsome chapel attached to the infirmary.

Previous to the meeting in the museum, the Vice-Chancellor of the University (Dr. Sewell) entertained Prince Leopold and a large number of the friends and supporters of the infirmary at luncheon in the New College Hall. An interesting episode at the meeting was the presentation of a handsome testimonial to the chairman of the Committee of Management and treasurer of the infirmary, the Rev. John Slatter, in recognition of numerous years of service to the institution.

THE SMALL-POX EPIDEMIC.

IN the twenty large English towns embraced by the Registrar-General's Weekly Returns 79 deaths from small-pox were registered during the week ending 2nd inst., corresponding with the number returned in the previous week. Sixty-one occurred in London, 6 in Liverpool, 8 in Manchester and Salford (exclusive of 1 municipal fatal case in the Monsall Hospital), and 4 in Oldham. The epidemic shows but slight signs of disappearing from Liverpool or Manchester and Salford, and the fatality of the disease is said to be increasing in Oldham. It is satisfactory to find that no death from small-pox was registered in the other fifteen of the twenty towns.

In London the registered deaths from small-pox, which had been 78, 70, and 69 in the three previous weeks, further declined to 61 last week, of which 27 were certified as unvaccinated and 12 as vaccinated; the medical certificates in the remaining 22 cases did not contain any information as to vaccination. Of the 61 fatal cases, 32 occurred in the Metropolitan Asylum Hospitals, 3 in the Highgate Small-pox Hospital, and 1 in the Pancras Small-pox Hospital; the remaining 25 were registered in private dwellings. After

distributing the 36 fatal hospital cases, the Registrar-General reports that 7 of the deceased small-pox patients had resided in Lambeth, 5 in Bow, 5 in Islington, and 4 in Paddington. It is noteworthy that no less than 20 of the 61 deaths from small-pox were of children under five years of age, of whom fifteen were certified to be unvaccinated, and the rest "not stated" as to vaccination. Since the commencement of the present epidemic 722 children, aged less than five years, have died from small-pox in London, affording conclusive evidence either of the neglect of vaccination or of inefficient vaccination. There is too much reason to fear that certificates of successful vaccination are frequently issued when the vaccination has been far from satisfactory or of a character to afford trustworthy protection from small-pox. These defects in the administration of vaccination can only now be remedied by a careful inspection of the vaccination marks of children in elementary schools, which may be regarded as the only reliable evidence of true successful vaccination. Of the twenty-five deaths from small-pox registered last week in private dwellings, three occurred in Islington, three in Walworth, and three in Peckham.

In the outer ring of suburban London eight deaths from small-pox were registered, of which five occurred in West Ham, one in Stratford, one in Acton, and one in Hendon.

THE FAMINE IN INDIA.

THE accompanying extracts from *The Times* of June 4th, concerning the famine in Southern India, fully bear out the remarks on the same topic which appeared in THE LANCET of May 12th.

"Our correspondent in Southern India writes under date Madras, May 5th:—There is no change for the better in regard to famine prospects. In fact, in most districts affairs are becoming critical, and nothing but an early and plentiful rain can avert disaster. Since my letter of the 28th of April the sky has been almost without a cloud, and no sign of rain has appeared to cheer the hearts of the drooping peasantry. Prices of grain are advancing, and it is feared that the principal part of the Burmese rice crop has been secured for the European markets, and it will only be diverted to Madras under the stimulus of advancing rates. It seems doubtful whether Bengal and our own northern districts are capable of sending much more grain to the famine tracts, and if Burmah cannot help, I fear the food-supplies will be very deficient in the course of the next three or four months. Our local merchants are beginning to be anxious, and to think that present stocks will not long hold out if the up-country demand is likely to increase. .....It is interesting to note, in connexion with the deteriorated health of the people, the official returns of mortality in the famine districts. These have been published in the *Gazette* for the months of December and January—that is, for the period of the commencement of the famine,—but the later returns have not yet seen the light. The death-ratios of the afflicted districts for the two months were as shown below for every 1000 of the population. The ratio for each month is, of course, the annual ratio of mortality.

District.	Dec., 1876.	Jan., 1877.	District.	Dec., 1876.	Jan., 1877.
Kurnool . .	148·3	78·2	Chingleput .	36·6	78·1
Bellary . .	53·5	67·4	Nellore . . .	59·1	97·1
Cuddapah .	58·7	118·7	North Arcot .	37·3	83·1
Madras . .	62·2	112·9	Salem . . .	42·9	62·6

Now, the usual death-rate, or registered deaths, in these districts for the same season of the year does not average more than 20 per 1000 of the population.....There is no evidence of any value, I think, to show that the population in India is beyond the capacity of the land to support. It must be remembered that every pound of grain consumed in the famine tract of the south during the present scarcity has been supplied by India itself, and that the transfer has been accomplished mainly by the railways and ocean steamers; and while an enormous local failure of crops over an area inhabited by 20,000,000 of people has prevailed, India has still been able to add largely to her exports of wheat to Europe. There is nothing in the condition of the famine-stricken district of this presidency to point to over-population, and when the famine is over it may be found that the districts are suffering from want of people to till the soil."

SOCIAL SCIENCE ASSOCIATION.

The Council of the Association has presented the following resolutions to the Secretary of State for the Home Department:—

Coroner's Courts.

1. That in the opinion of this Council a Parliamentary inquiry into the mode of appointment, the office, duties, and jurisdiction of coroners, is imperatively demanded.

2. The Council draw attention to the fact that the office of coroner is one of high antiquity and great utility; that it has been the subject of much and intricate legislation, and has come in process of time to be attended with inconveniences in respect to the constituency by which the coroner is elected, the manner of election, the abolition of a standard of qualification, the mode of remuneration, the procedure and place of holding the courts, as well as many points relating to functions, procedure, and responsibility. The Council are of opinion that in consequence of various social changes since the time of the original creation of the coroner's office, the expediency of retaining the coroner's jury, either at all, or at least in its present form, the existing relations of the coroner to the justices of the peace, and the provisions for the use of expert witnesses, have become matters demanding fresh and special arrangements.

3. That the question of inquiry into the cause of fires is one of urgency, and should be considered in regard to the appointments, duties, and functions of coroners.

River and Canal Population.

That in the opinion of this Council the condition of the canal and river population is such as to demand the early attention of the Legislature in order to prevent—(1) Overcrowding. (2) The spread of infectious diseases. (3) The evasion of the Acts for the Registration of Births and Deaths and Vaccination. (4) The neglect of education and the deterioration of morality, as necessarily prejudicial to health and social advancement.

SPIRILLA IN TROPICAL FEVERS.

To the Editor of THE LANCET.

SIR,—I beg to announce that in the blood of individuals who are attacked with fever at the present time in Bombay, there may often be found numerous and active spirilla. Commonly, but not quite invariably, the presence of these minute organisms is limited to the periods of high temperature, and in my experience hitherto the spirillum may always be found in those fevers which present a clear tendency to relapse, after an interval longer than any yet recognised amongst intermittents so-called. From a number of instances, however, which have come before me, and of which I possess full notes, it is already evident that also in types of fever which ordinarily would be termed "remittent," or possibly "intermittent" (for intermediate grades are many), the blood may sometimes be found to contain the spirillar filaments. The latter here closely resemble those alluded to by Dr. B. Sanderson in his summary on European relapsing fever, printed in the Health Reports of the Privy Council (New Series, No. iii., London, 1874), and I may add that further inquiries are now in hand regarding the import of this new observation.

I am, Sir, your obedient servant,

Bombay, May 14th, 1877. H. VANDYKE CARTER, M.D.

"STRIKING THE FLAG."

To the Editor of THE LANCET.

SIR,—I beg to thank you for having inserted my letter on the 2nd June in your pages, and for your flattering observations regarding myself.

I trust, however, you will permit me to say that you have

in your remarks, under the above heading, misunderstood the spirit and object of my letter.

I do not disbelieve in the influence of the infinitesimal, nor do I abandon the application of the law of similars. On the contrary, I believe, with the chemists, that the one-millionth part of ammonia can be detected in a given quantity of water; and I believe with Spallanzani, that the millionth of a grain of frog sperm can impregnate the ovum.

But while I believe in the action of infinitesimals in nature, I at the same time believe that palpable doses of medicine are generally more efficacious in the treatment of disease than infinitesimal doses; and further, seeing that Hahnemann's doctrine of infinitesimals has been the chief barrier to the investigation of the law of similars, I think it wise to abandon, as far as possible, their use in the treatment of disease.

Further, in my letter, I hold, with Hippocrates, that some diseases are best treated by similars and some by contraries; and this being the case, I hold that those who so practise cannot correctly call themselves homœopathists.

I do not in my letter surrender myself as a captive on unconditional terms, but I approach the profession as an ambassador offering peace on the basis of mutual respect and forbearance.

I strike no flag and I surrender no principle; but I claim, as a legally qualified medical man and a gentleman, who desires to find and follow truth wherever he can discover it, and as one who assumes no distinctive name, a moral right of admission to your medical societies, and to unrestrained professional intercourse with the entire body of medicine.

Yours sincerely,

GEORGE WYLD, M.D.

Great Cumberland-place, June 4th, 1877.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

Friday, June 1st.

MEDICAL ACTS.

Dr. LUSH moved that the order for the second reading of the Medical Act (1858) Amendment Bill be read and discharged, remarking that it was his intention to move for leave to introduce another Bill on the same subject.

The motion was agreed to and the Bill withdrawn.

Monday, June 4th.

THE LATE ARCTIC EXPEDITION.

Dr. PLAYFAIR asked the Secretary to the Admiralty, in the absence of the First Lord, whether, having received a report, of date March 3rd, from the Admiralty Committee on Scurvy, to the effect that the early outbreak of scurvy in the spring sledging parties of the late Arctic Expedition was due to the absence of lime-juice from their provisions, and, further, that in not including lime-juice the officer in command of the expedition deviated from the Memorandum of Recommendations and Suggestions of the Medical Director-General furnished to Sir George Nares by the Admiralty for his information, and that such deviation was not proper, he had taken any steps in respect to this report with a view to prevent similar calamities on future occasions.

Mr. A. EGERTON.—As there is no intention at present to fit out any Arctic Expedition, it is unnecessary to take any immediate steps as to the issue of lime-juice, in consequence of the Report of the Committee to which the hon. member refers. Should, however, at any future time a similar expedition be sent out, the experience of the last one will doubtless not be lost upon the Admiralty. I may add that directions have been given for a communication to Sir George Nares upon the subject of the report, which will be laid upon the table.

Dr. PLAYFAIR.—In consequence of the answer to my question, which was not confined to Arctic expeditions, I shall call attention to the report on the motion for going into Committee of Supply.

PUBLIC HEALTH (METROPOLIS) BILL.

Mr. SCLATER-BOOTH obtained leave to bring in a Bill to consolidate and amend the law relating to the public health in the metropolis. The Bill was brought in and read a first time.

Obituary.

PETER BROTHERSTON, F.R.C.S. ED.

BY the sudden death of Mr. Brotherston, of Alloa, in Clackmannanshire, we have lost one of our best country surgeons.

While a student in Edinburgh he attracted the attention of Mr. Syme, who formed so high an opinion of his aptitude for surgical work that he frequently requested him to assist at his private operations. Having obtained his diploma from the College of Surgeons, London, he returned to his native town, and it was not long before he acquired the largest practice in the district.

Mr. Brotherston possessed in a peculiar degree that decision and promptitude which are so essential to every medical man, and with these gifts, accompanied by a clear head and a steady hand, he was enabled to perform many operations of a serious nature. These included numerous amputations of the major degree, several excisions of the knee, shoulder, and elbow, and various operations in the region of the throat.

The difficulty of treating the more severe cases in the poor houses suggested to Mr. Brotherston the idea of establishing a small cottage hospital, which, with the aid of a few friends, he was shortly enabled to carry out. To this he devoted a certain proportion of his time daily, and its success is sufficiently attested by the fact that in 1876 seventy patients were treated under its roof.

The results of his work he published from time to time in valuable communications to the different medical journals, the principal of which were: "Cases of Excision of the Knee-joint," "Three cases of Empyema occurring after Scarlatina, treated by Paracentesis," and "Provincial Surgery, as illustrated by cases treated in the Alloa Hospital," which last was read, by special request, before the meeting of the British Medical Association in Edinburgh in 1875. He was a member of the principal medical societies in Edinburgh, and was well known both in that city and in Glasgow as an able surgeon.

His many acts of kindness to the poor and those in straitened circumstances will only become known now that he is gone, for he was a man with a large heart, and one who to relieve suffering humanity spared himself no exertion, thinking but too little of the remuneration.

He took a deep interest in the Archæological Society, which was founded several years ago in Alloa, and before it he read several interesting communications. His arduous labours, extending over a period of upwards of thirty years, in 1875 began to tell seriously on his health, and, by the advice of his friend Dr. Begbie, he spent a few months in San Remo. On leaving for Italy he was presented by his grateful townsmen with a sum of money, and this Dr. Brotherston highly valued as being a pleasing token of their appreciation of his long and faithful services in Alloa. Returning in the summer of 1876, he was able to resume a great part of his practice, but it was only for a time, as it soon became evident that disease of a serious nature was advancing in his chest. With an energy peculiarly his own, he continued to see his patients until a late hour of the night previous to his sudden demise, which took place early on the morning of the 20th of April. His loss will long be felt in Alloa and the surrounding district, and it will not be easy to fill the place of Peter Brotherston.

GEORGE MORLEY HARRISON.

THE subject of this brief memoir was born at Chester, on the 15th April, 1823, and was principally educated at the Wesleyan Preparatory School, Woodhouse-grove, Leeds, of which establishment his grandfather was governor. He was apprenticed to his uncle, the late Mr. Morley, of Leeds, a surgeon in extensive practice. His medical studies were pursued first at the Leeds School of Medicine, where he obtained several distinctions, and subsequently in the metropolis, at Guy's Hospital, obtaining the membership of the Royal College of Surgeons in 1845.

In 1849 he commenced his career in Manchester, and

practised most successfully as a prescribing surgeon, having a highly respectable clientelle. About the year 1851, he was elected honorary surgeon to the Ardwick and Ancoats Dispensary, which office, after filling with the greatest assiduity, he relinquished in a few years, when he was unanimously elected consulting surgeon. In 1856 he commenced to lecture on Forensic Medicine at the Chatham-street School of Medicine and Surgery, and continued his lectures after its incorporation with the Pine-street School as the Manchester Royal School of Medicine and Surgery, and again at Owens College, when the medical school became amalgamated with that institution. This position he resigned in the year 1876. In 1873 he was elected President of the Manchester Medico-Ethical Society, and at the expiration of his year of office was again chosen for 1874.

Of late years his thorough practical knowledge, combined with his sound treatment of disease, brought him frequently into requisition as a consultant, in which capacity his uniform consideration and general kindness endeared him alike to patient and colleague. As a practitioner having a widely-scattered practice, his time was too fully occupied to allow much leisure for writing, so that beyond a few lectures to the working classes on sanitary and other cognate subjects, he never appeared in print.

By his untimely death his patients have lost a kind and sympathetic friend, in addition to a valued adviser, whilst only those who had the privilege of knowing him intimately can realise to the full extent the loss they have sustained; indeed, his character has been well brought out by a very intimate friend in words expressed to the present writer: "He was the most unselfish man I ever knew."

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed the examination in the Science and Practice of Medicine and received certificates to practise on May 31st:—

Coates, William Henry, Hackney-road.
Floyd, John, Oxford.
Nariman, Kaikooro Loraljt, Bombay.
Tritton, William Parsons, Kilburn.

The following gentlemen also passed the Primary Professional Examination:—

Frank Marsh, King's College; John William Stone, St. Bartholomew's Hospital; Geo. Edw. Alex. Cheesman, Charing-cross Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The final examination for the diploma of Fellow of the College, which commenced on Thursday, May 31st, was brought to a close on Monday last. Of the twenty-two candidates, sixteen passed the four days' examination successfully.

[In last week's list of gentlemen who passed the First Professional Examination for the Fellowship of the College of Surgeons, for "Jas. K. Keer, Belfast," read "J. King Kerr, Belfast."]

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Fellows, held this week, the following were elected for the ensuing year:—President: Robert McDonnell. Vice-President: Philip C. Smyly. Council: John K. Barton, Richard G. H. Butcher, Samuel Chaplin, William Colles, John Cronyn, John Denham, Edward Hamilton, A. Jacob, George H. Kidd, Edward Ledwich, Rawdon Macnamara, Edward D. Mapother, Alfred H. McClintock, Prof. McDowel, George H. Porter, Joliffe Tufnell, Albert J. Walsh, W. Wheeler, and Henry Wilson. Secretary: William Colles.

THE LATE DR. EDMUND JONES.—At the Harewood-End Petty Session the magistrates unanimously passed the following resolution, and directed the clerk to send a copy to Mrs. Jones: "The magistrates of the Harewood-End Petty Sessional Division cannot meet for the first time after the lamented death of their brother magistrate, Edmund Jones, Esq., without recording their sense of the loss they have sustained, and testifying to the great attention, kindness, and regularity which he exhibited during the many years in which he acted for this division. They desire to express their sincere feeling of sympathy with Mrs. Jones in the great bereavement which she has sustained."

IRISH MEDICAL ASSOCIATION.—The annual meeting was held on Monday, the 4th inst., when resolutions were passed in reference to the compulsory superannuation of Poor-law medical officers; for a fund to provide annuities to widows and orphans of Poor-law medical officers; for assimilating the Vaccination laws with those of England; and the position and services of medical officers of health. The following office-bearers were elected:—President: Dr. Darby. Vice-presidents: Drs. Hudson, S. Browne, Brodie, and Nolan. Council: Drs. Baggot, Charles Benson, H. G. Croly, Drapes, Duffy, Faussett, Gray, Grimshaw, Hayes, A. H. Jacob, D. Jacob, Kelly, Kenny, Longworth, Lyster, Macnamara, Martin, Mayne, Molony, J. Moore, Percival, Pollock, George Porter, Purcell, Sharkey, Smith, Speedy, Spencer, Target, Usher, Walsh, Whistler.

HARVEY TERCENTENARY MEMORIAL FUND.—We are requested to state that subscriptions for the erection of a statue of Harvey, the discoverer of the circulation of the blood, and father of English physiological science, at Folkestone, his birthplace, are earnestly requested. They may be sent to Sir G. Burrows, Bart., M.D., F.R.S., 18, Cavendish-square, London, W., or Mr. Prescott Hewett, F.R.S., 1, Chesterfield-street, Mayfair, London, W., the temporary honorary treasurers; to Mr. George Eastes, M.B., 69, Connaught-street, Hyde-park-square, London, W., or Mr. W. G. S. Harrison, B.A., town clerk, Folkestone, the honorary secretaries; or they may be paid to the account of the fund at the Western Branch of the Bank of England, Burlington-gardens, London, W. A meeting of the committee, of which the Right Hon. the Earl of Derby is chairman, will shortly be held for the purpose of commissioning a sculptor to undertake the work.

Medical Appointments.

ADAMS, G., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Bedminster Rural Sanitary District, vice the District Medical Officers, whose appointments have expired, at £100 per annum.

ALLAN, J., M.A., M.B., C.M., has been appointed Assistant House-Surgeon to the Northern Hospital, Liverpool, vice Thompson.

BOND, W. J., M.B., L.R.C.S.Ed., has been appointed Medical Officer for the Piddington District of the Bicester Union, vice Gent, resigned.

CLAREMONT, Mr. C., Junr., has been appointed Assistant Medical Officer to the Charing-cross Hospital, vice Wickers, appointed Resident Surgical Officer.

CRAVEN, R. M., M.R.C.S.E., L.R.C.P.Ed., has been appointed an Honorary Medical Officer to the Southport Convalescent Hospital and Seabathing Infirmary, vice Barron, resigned.

DAVIES, T., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Llanwrin District of the Machynlleth Union, Medical Officer of Health for the whole of the Machynlleth Rural Sanitary District with the exception of the Towyn and Pennal Districts, Surgeon to the Bryn-yr-Eglwa Slate Quarry, the Morben Slate Quarry, the Llwyn-givero Slate Quarry, the Y-trad-Einim Lead Mine, the Cwm-byr Lead Mine, the Machynlleth Friendly Society, and the Machynlleth Odd Fellows Club.

GOSSET, G., M.B., M.R.C.S.E., has been appointed Medical Officer for No. 1 District of the Abingdon Union, vice Martin, resigned.

HACKNEY, A. H., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Parish of Heathfield, in the Hailsham Union, vice Percy, resigned.

HOOLE, Mr. H., has been appointed Resident Obstetrical Officer to the Charing-cross Hospital, vice Whitehead, whose appointment has expired.

JAY, F. F., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Audlem District of the Nantwich Union, vice Lyon resigned.

JOHNSTON, W., M.D., C.M., has been appointed Assistant Medical Officer of Health for the Leicester Urban Sanitary District.

LEAHY, A. W. D., L.S.A.L., has been appointed Assistant Surgical Officer to the Charing-cross Hospital, vice Biden, whose appointment has expired.

MOLONY, H. G., M.D., C.M., has been appointed Medical Officer, Public Vaccinator, &c., for the Castletown Dispensary District of the Croom Union, co. Limerick, and Sanitary Officer for the Croom Rural Sanitary District, vice White, deceased.

PARKER, R., F.R.C.S., has been appointed Lecturer on Surgery at the Liverpool Royal Infirmary School of Medicine, vice Hamson, resigned.

SIMON, A. C., M.R.C.S.E., L.S.A.L., has been appointed House-Surgeon to St. Peter's Hospital, vice Manders, whose appointment has expired.

THOMPSON, H., M.R.C.S.E., L.S.A.L., has been appointed House-Physician to the Northern Hospital, Liverpool.

WEBB, H. G., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer and Public Vaccinator for the No. 2 District of the Northleach Union, and Medical Officer of Health for the No. 2 Sub-district of the Northleach Rural Sanitary District, vice Wise, resigned.

WELLS, T. S., F.R.C.S.E., has been appointed Consulting Surgeon to the British Lying-in Hospital, Endell-street, vice Sir W. Fergusson, Bart., deceased.

WICKERS, H. A., M.R.C.S.E., has been appointed Resident Surgical Officer to the Charing-cross Hospital, vice Conolly, whose appointment has expired.

WOODWARD, F. E., L.R.C.P.L., M.R.C.S.E., has been appointed Visiting Surgeon to the Chester General Infirmary, vice McEwen, resigned.

Births, Marriages, and Deaths.

BIRTHS.

ADAMS.—On the 4th inst., at West Town, Somersetshire, the wife of G. E. D'Arcy Adams, M.D., of a son.

CHESSALL.—On the 5th inst., at Horley, Surrey, the wife of Willliam Chessall, M.D., of a son.

CREW.—On the 2nd inst., at Greenfield, Alderley Edge, the wife of Eli Crew, L.R.C.P.Ed., of a son.

CROOM.—On the 2nd inst., at Hope-street, Edinburgh, the wife of J. Halliday Croom, M.B., F.R.C.S.E., of a son.

DEEPING.—On the 28th ult., at Southend, Essex, the wife of G. D. Deeping, L.R.C.P.L., of a son.

LANCHESTER.—On the 1st inst., at Park House, Croydon, the wife of Henry T. Lanchester, M.D., of a daughter.

LOVELL.—On the 29th ult., at Wellington-road, St. John's-wood, the wife of Francis Otley Lovell, M.R.C.S.E., prematurely, of a son, still-born.

LYSTER.—On the 2nd inst., at Devonshire-road, Prince's-park, Liverpool, the wife of Chaworth E. Lyster, M.D., of a daughter.

MILLER.—On the 6th inst., at the Close, Basingstoke, the wife of F. D. Miller, Esq., L.R.C.P.L. &c., of a son.

O'FARRELL.—On the 3rd inst., at Boyle, the wife of George Plunkett O'Farrell, M.D., of a daughter.

PALMER.—On the 5th inst., at Old Kent-road, the wife of Frederick J. Morton Palmer, M.B. &c., of a son.

PARROTT.—On the 25th ult., at Hayes, Middlesex, the wife of Edward J. Parrott, L.R.C.P.L., of a son.

PHELPS.—On the 2nd inst., at Freshwater, Isle of Wight, the wife of William Phelps, M.R.C.S.E., prematurely, of a daughter.

PHIBBS.—On the 24th ult., at Boundary-road, St. John's-wood, the wife of Robert Featherstone Phibbs, L.R.C.P.Ed., of a son.

TREVES.—On the 31st ult., at King's Cliffe, Northamptonshire, the wife of Edward Treves, M.R.C.S.E., of a daughter.

WILSON.—On the 1st inst., at Eglinton-street, Irvine, the wife of William Wilson, M.D., of a son.

MARRIAGES.

COOMBS—TYRER.—On the 5th inst., at St. John's, Bootle, by the Rev. Richard W. Bardsley, M.A., Graham Lowe Coombs, M.R.C.S.E., of Moss View, Ince, near Wigan, to Alicia Emma Bland, eldest daughter of David John Tyrer, Esq., of Springbank, Bootle, Liverpool.

ENGLISH—CRISP.—On the 6th inst., at St. Luke's, Chelsea, by the Rev. A. G. W. Hunt, M.A., Rector, Eliza (Minnie), eldest daughter of Edwards Crisp, M.D., of Chelsea, to Thomas Johnston English, M.R.C.S., only son of Thomas English, M.D., of Fulham-road, Brompton.

THORNHILL—CAMPBELL.—On the 26th ult., at St. Stephen's, Guernsey, Thomas Alen Thornhill, M.B., Surgeon-Major, Army, to Annette Charlotte, daughter of the late A. D. Campbell, Esq.

DEATHS.

ABBOTT.—On the 22nd ult., at Brigg, Lincolnshire, Benjamin Abbott, M.D., aged 79.

ALLEN.—On the 3rd inst., Mr. Morgan H. L. Allen, of Wellington-road, St. John's-wood, aged 23.

BUTTON.—On the 2nd inst., at Thelnetham, Suffolk, Benjamin Button, M.R.C.S.E., aged 53.

DICKSON.—On the 15th ult., at Glasgow, John Robert Dickson, M.D., aged 56.

HANHAM.—On the 26th ult., at Lansdown, Bath, Frederick Hanham, M.R.C.S.E., aged 71.

MOORHEAD.—On the 26th ult., at Tunbridge Wells, Thomas Moorhead, M.D., Deputy Surgeon-General, Army, aged 55.

RICHARDSON.—On the 31st ult., at North-road, Highgate, William T. Richardson, L.S.A.L., aged 71.

SPICER.—On the 27th ult., at Chard, Northcote William Spicer, M.R.C.S.E., aged 84.

THOMAS.—On the 25th ult., at Tiverton, Richard Roberts Gregory Thomas, M.D., aged 56.

VARDY.—On the 17th ult., at Whalton, Northumberland, Joseph Vardy, M.R.C.S.E., aged 56.

WOOD.—On the 6th inst., at Globe-street, Wapping, Edmund Wood, M.R.C.S.E., aged 57.

[N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.]

BOOKS ETC. RECEIVED.

Prof. McCall Anderson on the Curability of Tubercular Affections.
Whose Dog is it? or the Story of Poor Gyp.
H. A. Page: De Quincey's Life and Writings. With Letters. 2 vols.
The Veterinarian. No. DXCIV.
Transactions of the Pathological Society of Philadelphia. Vol. VI. 1875-6.
Dr. D. Bulkley on the Nomenclature and Classification of Diseases of the Skin.
Dr. D. Bulkley: Two Cases of Morphœa.
S. S. Alford on Dipsomania.
Transactions of the Odontological Society of Great Britain. Vol. IX. No. VII.
Dr. C. J. Blake on Perforations of the Membrana Tympani.
Dr. C. J. Blake: Otological Review.
Dr. D. Bulkley: Archives of Dermatology.
Dr. J. M. Sims: Discovery of Anæsthesia.
Boston Medical and Surgical Journal. May.
The Practitioner. June.
Transactions of the American Gynæcological Society. Vol. I. 1876.
Dr. G. Heaton: Cure of Rupture.
Medicinal Plants. Part XXI.

SECRET DRINKING.

IN addition to the lists of names already published, the following members of the medical profession have signed the protest against the "Grocers' Licence" up to this date.

Mr. J. Square, Dr. C. R. Prance, Plymouth; Mr. E. P. Gutteridge, Maldon; Dr. J. J. Barrett, London; Mr. F. Cufande; Mr. S. B. Shekleton, Blackwood, Newport; Mr. J. Earle, Manchester; Dr. J. Wier, Carrickfergus; Dr. J. H. Stowers, London; Mr. M. Yourith, Clonee; Mr. J. C. Macaulay, Honiton; Mr. W. L. Emmerson, Mr. J. Baird, Mr. J. B. Emmerson, Dr. J. Frain, Mr. S. Wilson, Mr. C. W. C. Fletcher, South Shields; Dr. J. W. Haniell, Worksop; Mr. E. Jeffreys, Mr. J. F. Parr, Chesterfield; Mr. H. Collins, Wolverhampton; Mr. J. Brighouse, London; Mr. G. H. Lineker, Hull; Mr. J. W. King, Ambleside; Dr. F. J. Hensley, London; Mr. T. S. Swinson, Mickleton; Mr. T. N. Dean, Manchester.

Notes, Short Comments, and Answers to Correspondents.

CESSPOOLS, WELLS, AND DIPHTHERIA IN BROMLEY.

IN the week ending last Saturday two more fatal cases of diphtheria were registered in Bromley (Kent), proving that the epidemic, although very recently somewhat quiescent, still lingers in the neighbourhood. It appears impossible to doubt that there is an intimate connexion between the fatality of this disease and the supply of water to a considerable extent of local cottage property from contaminated surface wells. It is with great regret that we find Dr. Baylis, the medical officer of the combined sanitary district, defending the use of this water on the ground that the substitution of pure company water would increase the sewerage difficulty, under which the Local Board suffers, until the completion of the West Kent main drainage scheme. This may afford a sufficient reason why water carriage should not be adopted for sewage disposal, but can afford no possible excuse for the wilful neglect of the Local Board to insist upon the supply of pure water to the cottage property now suffering from diphtheria, apparently caused by the undoubtedly impure water from the surface wells. Dr. Baylis attributes the excessive zymotic fatality in Bromley during 1876 to "sanitary defects, indicating improper storage of putrefying matters, and an absence of effective drainage." We venture to think that he underrates the effect of the impure and imperfect water-supply. At the last meeting of the Bromley Local Board a question was under discussion which throws considerable light, not only upon the probable quality of the local well water, but upon the inefficiency of the Board to deal with sanitary matters. It was reported that an old well was being used as a cesspool. After some discussion it was unanimously decided that such use of an old well did not constitute a public nuisance, and that beyond closing a neighbouring well, which had become thereby polluted, no further steps should be taken. This newly-closed well may, therefore, in time be utilised as a cesspool, and it is not difficult to imagine the future pestilential condition of the neighbouring subsoil, even after the wells have all been condemned as sources of drinking-water, which surely cannot be long delayed when the use to which the disused wells are turned is more generally known. Such action as this of the Bromley Local Board is alone enough to shake one's faith in the possibility of good local self-government in health matters in small districts.

Mr. Macnamara's lecture shall appear next week.

THE TYRANNY OF STREET MUSIC.

To the Editor of THE LANCET.

SIR,—If you will encourage correspondence on this subject, there are hundreds of medical men who can give you cases in point to prove how real and all-pervading this tyranny of street music is. No rank in society, no profession or occupation in life, can escape it, and it presses with all its force on the poor who live in narrow streets. It is a grave error to suppose that it is the rich man's special torment. True it is that the life led by the folk that are called rich makes them more sensitive to all sorts of street noises; but sickness, whether of body or brain, is a great leveller, and all noises sound loudest in small streets and narrow thoroughfares. Nor let this fact be overlooked that such inadequate remedy as the law provides is most difficult of application among the poor. The rich man can send his servant to stop, not, be it well understood, the first outburst of the barrel-organ or the brass band, but the continuance of the nuisance when perhaps nine-tenths of the mischief has been done; but the poor man very likely has only at his command the wife who is watching at his bedside, and who (I speak of what I have seen) has no means of action but what consists in getting hastily together what money she has at hand (she cares not what it is, for at that moment of agony she will give all she has in the world), and throwing it to her tormentor.

At present I am content to look at this as a poor man's question. I may on another occasion ask you to grant me space to treat of it more fully. But I must insist on this as a fact not to be disputed or denied, that at present there is practically no remedy for the outbreak of street music, and only a very bad one, slow and uncertain in its operation, for a continuance of the nuisance. The sooner the public are made to understand this, and to take it to heart, the better.

I am, Sir, your obedient servant,

May, 1877. A LONDON PHYSICIAN.

CHARITY VOTING REFORM.

AN animated discussion on this important subject occurred on Thursday, the 31st ult., at the Offices of the Royal Medical Benevolent College in Soho-square, on the occasion of the annual meeting. It may be in the recollection of most of our readers that the polling-day of the College is now entirely abolished, the great body of subscribers being required to return their voting-papers, marked, direct to the Secretary of the College before the day of election. The discussion alluded to arose upon remarks made by Dr. Hare, who spoke as one of three or four delegates from the Charity Voting Reform Association. This Association is anxious to induce the Council of the College to go several steps further in the way of reform—i. e., at once to prohibit all canvassing or trafficking in votes by means of cards, circulars, or personal application. The suggestion was supported by Sir Rutherford Alcock, Dr. Broadbent, Mr. Jabez Hogg, and others, and, though the meeting was but scantily attended, a strong feeling in favour of the reforms was manifest. It was ruled, however, that by the laws of the College the subject could not be formally discussed, nor any resolution proposed, at an annual meeting. A requisition was, therefore, framed and signed by many of the Governors present, asking the Council to call a special meeting, due notice of which will, we believe, be shortly given. It is hardly necessary for us to repeat that we are entirely in accord with the principles enunciated by the Charity Voting Reform Association. The Council of the Medical Benevolent College, having canvassed the Governors on the subject of voting, found that of 2357 subscribers who recorded an opinion, 2098 were in favour of the change. They have already taken a very important step in giving effect to the wishes of this large majority. We may summarise the remarks made in a paper addressed to the Council by the Charity Voting Reform Association, and repeat that the principle of canvassing inflicts upon widows and other applicants unnecessary labour, an expenditure of time and money that can be ill-afforded, and fosters that pernicious habit called begging-letter writing. An injury is frequently done to the poorest candidates, and those who can spend the most money—i. e., are the best off—succeed, while the poor and very needy fail.

Mr. Hodgkinson.—The paper, having appeared elsewhere, cannot be inserted.

"HOME HOSPITALS."

To the Editor of THE LANCET.

SIR,—It will have been seen from public advertisement that a scheme having the above title is being pushed with exalted civic patronage, and with all the energy and force usually brought to bear upon speculations originating in the vicinity of the Stock Exchange. The name, I would point out, involves a contradiction in terms, the words "home" and hospital," in ordinary English, being used in senses opposed one to the other. "Hospitals" are establishments for the relief of the sick poor, who cannot secure for themselves at "home" the skilled treatment and nursing that are within reach of the well-to-do. Now, however, it has suddenly been discovered that the "well-to-do" (including all the middle class of society, among whom the general practitioner looks for his patients) are not able to find adequate skill and attention, as heretofore, at their own homes. In order to support a joint-stock commercial speculation, they are to be persuaded to give up all the advantages and comforts of home, and to herd together in one grand institution. For this purpose they are asked to leave well-ventilated homes, and all the domestic arrangements that are at the command of the well-to-do, and incur the risk of living in an atmosphere vitiated by the aggregation of cases of disease of all kinds. It is well known that the collection of many patients in one building contaminates the atmosphere, and often thereby thwarts medical and surgical skill. The practice of having special cases, under special care, in lodging-houses has for some time past been gaining ground. It would be well that, before it becomes an established institution, the ratio of mortality in these private hospitals should be ascertained. I have reason to believe that preventable mortality not unfrequently arises from this system.

For the supposed advantages of the "Home Hospital," the patients, it is estimated, are to pay two guineas a week over and above medical fees, and the cost of stimulants and other extras—extras which, in all probability, would not arise at "home." Such a scheme does not meet the ordinary meaning of either word "home" or "hospital." It is consequently a misuse of the English language so to apply it.

There is another point from which it will be wise to regard this speculation before we follow the bell-wether, and rush headlong into the trap. If carried out, this joint-stock project will carry many a patient out of the hands of his ordinary medical attendant; more especially will it so affect the provincial practitioner. It is all very well to say that the medical attendant is at liberty to follow his patient; but practically it will be found impossible so to do, and thus his patient will be handed over to the care of the resident medical officer, or probably to that of some specialist. The patient will naturally demur to paying, in addition to hospital charges, the fee that will be only fairly due to his medical man for going possibly from a country town, or from one end of London to the other, and so it will come to pass that the latter will be quietly shelved in favour of the pecuniary interests of the shareholders of a commercial speculation.

I take leave, further, to doubt entirely the true call for this novelty. As a commercial speculation it may offer a bait to some who do not object to investments with somewhat doubtful prospect of dividends, or it may offer a tempting prospect to the "pures" and specialists, whose names are appended to the advertisement; but I am convinced that it must operate prejudicially to the interests of the general practitioner, who will therefore do well to hear the scheme fully expounded* before they lend their countenance thereto.

Your obedient servant,

Holloway, June 5th, 1877. W. B. KESTEVEN, M.D.

* A meeting for this purpose is to be held at the Mansion House on the 27th inst.

"REGISTERED QUACKS."

UNDER this heading we have received a communication, drawing attention to the fact that at least one registered practitioner is engaged in practices wholly unprofessional; in short, undistinguishable from the worst method pursued by unqualified quacks. We fear the case is not unique. Unfortunately the Medical Council has no practical interest in the proper conduct of professional business. However highly the service which that body has rendered to the cause of medical education may be esteemed, it is impossible to recognise any benefit conferred on the status of the profession. Perhaps severe critics may estimate the services of the Council in both respects as of equal value—i. e., *nil*.

Messrs. Baiss Brothers.—It is a parliamentary paper, obtainable through the usual channels.

Mr. R. Johnson.—We are not acquainted with the prevailing opinion.

ETHER INHALATION.

To the Editor of THE LANCET.

SIR,—As I have been informed by Messrs. Coxeter and Son, Grafton-street East, London, that many of the leading hospitals in London, Dublin, and the provincial towns of England, including those of Manchester, Birmingham, Leeds, and Liverpool, are using the ether inhaler suggested by me, for the benefit of those who have thus adopted it, and to prevent any disappointment or delay in producing anæsthesia, the following directions may be of use:—1. To tell the patient before administration that the ether vapour may at first have a suffocating feel, and should not be regarded, as the sensation will only be momentary. 2. To ask an assistant to hold the hands of the patient, so as to prevent the inhaler being suddenly snatched from off the face. 3. No solicitation whatever on the part of patients should be listened to as regards giving them a breath of fresh air, as they invariably cry out for it, and the anæsthesia would only be delayed. The sliding aperture in the mouth-piece may be left open for a moment, but should then be closed, so as to compel the patient to breathe and rebreathe the same ether-charged air, and the face-piece should be well pressed on the face, so as to cover the nose and mouth accurately. 4. To use none but the best anæsthetic ether, specific gravity 720 to 730; to pour only *one* ounce at first into the sponge; if more is required, it can be introduced by removing the brass cap on the face-piece; and when the cornea can be touched with impunity, and other signs of unconsciousness present (which usually takes place in less than two minutes), the inhalation need not be pushed farther. The sliding aperture may then be opened, and the operation proceeded with. The aperture may, however, be closed if necessary when the anæsthetic effect seems to be passing off. Children can be etherised just as well as adults with this instrument.

I would feel greatly obliged, and esteem it as a very great favour, if those who have adopted this inhaler would kindly let me know by post-card their experience of it, and whether I could give them any further information as regards its use, which combines simplicity, portability, and economy of first cost. The air-pad round the face can be supplied separately by Messrs. Coxeter and Son, and should be always inflated before administration.

Yours truly,

LAMBERT H. ORMSBY, F.R.C.S.,
Surgeon to the Meath Hospital, Dublin.

Lower Fitzwilliam-street, Dublin, May 29th, 1877.

Dr. Rogers.—The state of the law as regards the payment of analysts by coroners is most unsatisfactory. In the interests of justice, general as well as personal, the question deserves reconsideration in Parliament. It will probably be dealt with when the whole subject of the coroner's office and jurisdiction comes under review.

Mr. W. Hume Rothery.—Respectfully declined.

USE OF THE STETHOSCOPE IN JOINT DISEASE.

To the Editor of THE LANCET.

SIR,—A few weeks ago I was about to perform excision of the hip-joint in a case where the symptoms of advanced disease were pretty well marked, but no grating could be detected on moving the limb; on the contrary, the movements of the joint were perfectly free and smooth. It struck me that the stethoscope might possibly clear up the point, and on applying it in front of the joint while the limb was rotated, I found such a marked difference between the two sides, the rough grating of the diseased joint compared with the smooth rustle of the healthy joint, that all doubt was removed, and I operated at once. I found the head of the femur worn to a stump, but the acetabulum smooth and healthy, except a limited amount of caries at the lower edge, the healthy state of the acetabulum explaining the absence of grating.

I do not think the stethoscope is often used in this way; but I have no doubt it will often afford valuable information, not only in disease of the deep-seated joints, but probably also in abnormal states of ligamentous and muscular structures.

I am, Sir, yours &c.,

Newcastle-on-Tyne, June, 1877. W. C. ARNISON.

A. B. M.—It is most undesirable to adopt any mode of communicating with possible patients which may be construed as an indirect mode of advertising. Better trust to gradual spread of the information desired.

Medicus.—Curious specimens of Parsee English.

TÆNIA IN BLACKBIRDS.

To the Editor of THE LANCET.

SIR,—The following curious circumstance, which may interest your readers, has been brought under my notice.

A very young blackbird (this year's) died, and a subsequent examination revealed the presence of tænia in the intestinal canal. They were of considerable length, and their rings beautifully developed. On submitting them to Professor Cobbold, he pronounced them to be Tænia angulata (Rudolphi). They have never been described in this country, and have, I understand, only been observed in the thrush family. Another death has occurred in the same brood from the same cause.

Yours faithfully,

C. J. LAMBE EAMES.

Rockley-road, West Kensington-park, May 19th, 1877.

THE RECENT HORSE PLAGUE IN EGYPT.

THE *Veterinary Journal* for June quotes from the Transactions of the Imperial German Board of Health some statistics of this epizootic (typhus equinus) which may be of interest:—In the Province of Daccalieh, where the plague broke out in September, abated somewhat in October, and finally ceased at the beginning of November, it killed 4427 animals—viz., 2302 horses, 435 mules, and 1090 asses, in the space of sixty days. In Garbieh the disease broke out at the same time, but was not extinguished till the end of November. While it raged, 8099 animals succumbed, of which 5710 were horses, 768 mules, 2203 asses, and 308 camels. Among the last-named animals, but few cases occurred in any of the other provinces. In Menoufieh 31 camels, 803 horses, 65 mules, and 164 asses fell victims; while in the Province of Béhéré, where the plague lasted longer than elsewhere, the losses were between 4000 and 5000 head of live stock. In Alexandria the disease was confined within narrower limits. From September 19th to December 1st, only 178 horses, 33 mules, and 39 asses perished; while the greatest mortality on any one day never exceeded 10. Remembering that many cases must have escaped official recognition, owing to the bodies being at once thrown into the water or buried in the fields by their owners, it is probable that the total number of animals lost in the different provinces during the continuance of the epizootic may be roundly estimated at 32,000. The plague was on January last declared by the Egyptian sanitary department to be extinct.

E. T. M. should get the last Students' Number of THE LANCET.

THE "STARVATION" CASE AT RYDE.

To the Editor of THE LANCET.

SIR,—Last Saturday's number of THE LANCET having had an article in its columns on the death of Edward James Cooper, aged twenty-three years, an idiot of this workhouse, and the Local Government Board having issued their decision of the case, I shall be greatly obliged if you will insert in your next issue the following statement relative to the deceased.

As the verdict of "starvation" given at the coroner's inquest was chiefly influenced by Mr. Barrow's opinion of the post-mortem appearances, I beg to observe that no examination was made of the contents of the cranium, or of the heart or large bloodvessels, or of the gall-bladder; and I reaffirm the statement I made at the inquest, that the liver was in a state of congestion. About two inches of the commencement of the duodenum was the only part of the small intestines examined by Mr. Barrow, and this was pronounced in a healthy state. The left side of the transverse arch of the colon was in a state of inflation. On this collapsing Mr. Barrow made a rapid hand-over-hand examination of the intestines, which were neither laid open nor removed from the body; nor, contrary to his statement, was the rectum examined. Now, may I not well ask if this was a fair or just examination of the body of the deceased, involving as it did so important a question as starvation, on which also depended the reputation of a brother practitioner? I have not the slightest doubt but that Mr. Barrow's opinion was biased by his first interview with the relatives of the deceased. He was deputed by the coroner to make the post-mortem examination; why were not the intestines removed from the body, and opened up their entire length, and every particle of fæcal matter removed, both from them and from the rectum, and then weighed carefully, and compared with the quantity of nourishment taken the last two days of deceased's life? Nurse Booker's evidence before the Local Government Inspectors was to the effect that the deceased had a large and bulky evacuation on the Sunday night preceding his death on Tuesday afternoon; hence what quantity of fæcal matter could be expected to have been found in the body after death? allowing the deceased was sinking on the Monday, and died on the Tuesday afternoon, and during these two days took only liquid nourishment, and a little bread and wine. With regard to the body being devoid of fat, I doubt very much if the deceased ever in his better health possessed any fat since his childhood. Three years ago he was admitted to the workhouse, and he is described by those who had them the care of him as being almost as thin in condition as he was on this occasion. See, also, Dr. Mees's quarterly report of lunatics in his district. He was a perfect idiot, having not the slightest use of the upper or lower extremities, and consequently localised or fixed during the whole of his life in whatever position he might be placed, and I am satisfied his health had commenced to fail him long before he was brought to the workhouse, especially when it is remembered that idiots of this extreme type seldom attain the age he had arrived at. A few days after his admission to the workhouse, his mother in her visits, the nurse said, on one occasion thus apostrophised her son as he lay in her lap, "Ah! poor Teddy, I never thought you would have been here so long as this. I gave you a fortnight after your poor father died." The father of the deceased had then been dead six weeks, so that he had survived his father a month longer than his mother had expected. I insert this observation of Mrs. Cooper chiefly to show the mother's opinion of her son's health a short time before he was brought to the workhouse.

The dietary of the deceased the first three weeks was the aged and infirm, comprising meat and mutton-broth five days a week, pudding and pea-soup two days. Seventy-five persons are on this diet, of both sexes and different ages, and it includes the greater number of the imbeciles, all in fair health, and several of the young men going out daily to work on the premises.

No. 5 diet, on which the deceased was placed the last eight or nine days, gives meat daily, and I substitute for the morning gruel one pint of new milk.

I remain, Sir, yours obediently,
J. E. BUCKINGHALL, F.R.C.S.,
Medical Officer, Isle of Wight Workhouse.

Newport, Isle of Wight, June 5th, 1877.

A CORRESPONDENT asks for information as to whether there is any home or hospital for people suffering from epileptic fits in the Madras Presidency, anywhere in the neighbourhood of Bangalore?

Dr. F. J. Brown.—We hardly think it worth while to discuss the question further. The same arguments have been urged over and over again.

Medical Officer of Health.—We are not aware of any formulated requirement with respect to the cubic capacity of places of public assembly. Such a regulation is greatly needed. Much must obviously depend upon the frequency with which the atmosphere is changed, the mode of lighting, &c. Not uncommonly a room of nearly 4000 feet becomes unbearable with three or four gas-burners, although only two or three persons occupy the apartment for, say, three hours.

Dr. MacCormac should get the Register rectified.

EXTIRPATION OF THE SUBMAXILLARY GLAND: SALIVATION.

To the Editor of THE LANCET.

SIR,—Perhaps some of your readers may consider the following record possesses some surgical and physiological points of interest.

J. M——, aged nineteen, grocer's apprentice, of lymphatic temperament, but fairly healthy, consulted me on account of "a lump" on the right side of the neck below the jaw. The "lump" had been rubbed by an old woman (who enjoys a certain surgical reputation), and had been galvanised by an advertising practitioner. It had existed for two years, was painless, growing slowly, and freely movable. On the 23rd March I removed it, under carbolic spray, by a linear incision parallel with the lower border of the lower jaw. The deep cervical fascia was plucked up by a pair of forceps, and incised sufficiently to allow a flat director to be passed between it and the gland, when the incision was carefully extended. The surface of the gland was smooth, measuring two inches and three-quarters in its long axis, and an inch and one-sixteenth in its short axis; its shape was not unlike that of a potato. It was easily enucleated by the finger and thumb-nail. The slight hæmorrhage that occurred was easily stayed by pressure with a sponge. The cavity was then partially filled with antiseptic catgut, snipped up in order to entangle a clot which would afterwards become organised, and prevent a depression being observable after healing. The edges of the wound were brought together by catgut sutures, and the gauze and protective dressing were used. There was no rise in pulse or temperature, or change in appetite or sleep, at any time after the operation; only on the second day there was very marked salivation; the third day this symptom had disappeared. The wound was perfectly healed in a few days, leaving a faint bluish linear cicatrix, and the marks of the two catgut stitches which were not taken out; the part embedded in living tissue being absorbed, and the free ends falling off into the dressing. The tumour was examined by Mr. Knowsley Thornton, and found to belong to the class lympho-sarcoma. The only explanation of the salivation that has occurred to me is, that the irritation to the sympathetic and nerves connected with the submaxillary ganglion may have caused by reflex action an increased secretion by the remaining salivary glands.

Yours obediently,
Barrow-in-Furness, May 23rd, 1877. ERNEST SHEAV, F.R.C.S.E.

Mr. Clement L. Priestley.—Such incidents are so discreditable that it is kind to the profession not to publish them, at any rate before making an attempt to put things right by private remonstrance. Old quarrels should have been suspended under the circumstances.

UNQUALIFIED PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—I notice in your impression of May 5th a reference to unqualified practitioners.

In my district there are two chemists, one of whom continues the practice of dental surgery with that of midwifery and also visits patients; the other visits regularly. There are, besides, two unqualified men who practise as ordinary qualified practitioners.

There is a want of unanimity amongst the qualified men here as to what course to pursue, although all agree as to the propriety of putting a stop to this kind of practice, as, on account of these unqualified men taking clubs at a lesser rate of pay per annum, and attending midwifery for a lower fee, the interests of legitimate practitioners are considerably affected.

You will confer a great favour if in one of your earliest impressions you will indicate what is the legitimate course to pursue in order to put an effectual check upon this unfair mode of practice on the part of the above-mentioned chemists &c.

Yours respectfully,
May 17th, 1877. SIDONIA.

*** The parties should be prosecuted under the Apothecaries Act. If there is any false use of titles, then under the Medical Act.—ED. L.

Ignorance.—The hospital mentioned by our correspondent is the only one where the entrance scholarship carries with it free admission to the course of study. But at most, if not all, of the metropolitan schools there are entrance scholarships competed for at the end of September. Our correspondent would do well to consult the Students' Number of THE LANCET when it appears.

REFUSAL TO RESTORE TO THE REGISTER.

To the Editor of THE LANCET.

SIR,—Mr. Levenston's name has been struck off the Register on the paltry excuse of a letter addressed to him not having been answered "within six months," and this decision is "absolute"! Has it not occurred to the Medical Council that more reasons than one may prevent a letter from being delivered when sent by post?—e. g., it may be intercepted. It strikes me both the "Act" and the "discretion" of the General Medical Council require to be clipped. As the matter stands at present, the welfare of the many is placed at the mercy of the few.

Your obedient servant,
May 22nd, 1877. ONE WHO LIVES AND LEARNS.

*** The following are the resolutions passed by the Council in the case referred to. The Council would act very reprehensibly if it refused to restore a name to the Register on the mere ground of a letter not having been answered. There must be some misunderstanding.

"9. Resolved—(1). That the Council, having considered the application of Mr. Samuel Levenston to have his name restored to the Medical Register, decline to accede to it, unless Mr. Levenston shall furnish to the Executive Committee satisfactory evidence of character.

"(2). That the Council delegate to the Executive Committee the duty of inquiring into and deciding on the case, having regard to the requirement of the Council."

"STRIKING THE FLAG."

WE have received several communications on the subject of homœopathy and the alleged overture of the professors of that "system" to be recognised by the profession. Our correspondents advocate diverse views, but we cannot again open our columns to a discussion of homœopathy.

Mr. Hanner Dickson.—Carbolic acid is without doubt a powerful antiseptic, and may be useful as suggested; but the case is scarcely one in which prevention can be recommended, however desirable it may be to cure.

A Country Surgeon.—From £80 to £100 a year.

MILITARY SERVICE IN THE TURKISH ARMY.

To the Editor of THE LANCET.

SIR,—In answer to "M.R.C.S." (St. Ives) and others, who desire to learn something of the position &c. of English medical officers in the Turkish army, as I had a commission as surgeon in the Turkish army during the Turco-Servian war, I will state what the position then was, and which I have reason to believe still is.

1. He receives £25 from his Excellency Mushurus Pasha (the Turkish Ambassador, 1, Bryanstone-square, London) to defray travelling expenses to Constantinople. When he arrives there he presents himself to the Seraskierat (War Office), which is in Stamboul, just across the Golden Horn, and receives a month or six weeks' pay in advance.

2. The pay ranges from £12 to £20 a month, and each surgeon receives also rations and forage, which he is allowed to draw once a month in kind or money. As far as I am aware, the medical officers always received their pay, though perhaps somewhat irregularly, and with more or less loss, owing to the depreciation of the coined notes.

3. The field for practical work is immense, and, above all, the English surgeon is in *sole* and *full* charge of his regiment, ambulance or hospital, &c., and is not in any way hampered by the native doctors. I myself had a vast number of amputations and resections, both major and minor, especially when in charge of troops at the Red Cross Hospital and the Hôpital Militaire Turc at Sophia, Bulgaria; and my colleagues, Messrs. W. R. Cheyne and J. J. Roy were even more fortunate in the large number of cases they had.

4. Each medical officer is provided with a *pharmacien*, and also with a horse and two or three orderlies. He ranks as Col. Agassbi (Adjutant-Major).

5. The climate, on the whole, is magnificent (though very hot in summer, and very cold in winter), and the scenery is grand in the extreme.

6. The best route is to leave London any Thursday evening for Paris and Marseilles, sailing from the latter place by one of the steamers of the Messageries Maritime Compagnie at five o'clock on Saturday afternoon, arriving at Naples on Monday, Athens on Wednesday, and Constantinople on Friday. The best hotels for Englishmen in Constantinople are the Hôtel de Byzance and the Hôtel de Luxembourg, both in the Grande Rue de Pera.

I strongly advise no one to take out more luggage than is absolutely necessary, no saddlery or cumbersome baggage, but simply two suits of clothes (one thin, and the other thick), as he must wear Turkish uniform when out there, which is purchased wonderfully cheaply in the bazaars of Stamboul—drawers, jerseys, flannel shirts, paper collars, warm socks, two pairs of stout boots, a strong pint metal flask, a Whistler's British bulldog revolver and holster, a good strong knife, a mackintosh sheet, a few leather straps, and some soap. A large bottle of chloroform in a wooden case, a set of amputating instruments, with good sound tourniquets, and a pair of bullet forceps and probe; a few varieties of coated pills for his own consumption (I found Richardson's, of Leicester, admirably adapted for the purpose, bearing the extremes of cold, hot, and wet weather, combined with rough usage, without the slightest impairment). Some good quinine is a *sine qua non*, as intermittent fever is very prevalent, especially under the mountains and near the banks of the Danube, Meritza, and Morava rivers, where miasmata abound, camps being pitched without the slightest deference to hygienic principles. Astringents (especially opiates or pills of nitrate of silver with opium, or sulphate of copper with opium) are invaluable, as obstinate diarrhœa or even dysentery attack the stranger at first. He need not take out brandy, as Mr. Nunn, at the English Stores, Constantinople, keeps the best; but a few tins of Du Barry's Revalenta Arabica and Liebig's Extract of Meat will be worth their weight in gold, should he be taken ill in camp, and, from personal experience, I don't think anyone should go into the Turkish camp without these things in the medical chest, as the food up the country is simply execrable!

Lastly, I may add that he need not expect to make much money in Turkey; but if he cares for journalism, he will find, as I myself found (being the special correspondent of a leading London newspaper), that it is both pleasant, instructive, and lucrative.

It will afford me very great pleasure to give any further information which lies in my power to any medical gentleman who may be contemplating active service with the Ottoman armies in the field.

Yours faithfully,

WM. WALLACE ELMSLIE, L.F.P.S., &c.,
Late Surgeon to the Imperial Ottoman Army.

7, Seafield, Brighton (West), May 25th, 1877.

P.S.—I have omitted to add that it is *imperatively* necessary to obtain a passport from the Foreign Office (price 2s.), and to forward it to the Turkish Embassy to be stamped with the Ottoman *visa*.

AN EXPLANATION.

To the Editor of THE LANCET.

SIR,—Absence from home has prevented me from replying before to the paragraph in THE LANCET of May 19th, referring to the post-cards sent out from this office. I now beg to inform you that the issue was confined to members of our Society who have joined us since the last list of medical officers was published; and as to the publication by means of post-cards of the names and addresses of those medical gentlemen who are willing to extend the advantages of medical attendance to our members on the old and well-recognised plan of a quarterly payment, I can only say that it has been done constantly, ever since post-cards were established, at the request of practitioners residing in all parts of the United Kingdom, and it has never been found fault with until now, so far as I know.

I am, Sir, yours faithfully,

Hearts of Oak Benefit Society, THOMAS MARSHALL, Secretary.
Charlotte-street, Fitzroy-square, June 7th, 1877.

Compulsory Registration of Infectious Disease.—The subject has been discussed at length in these columns. There is no ground for the assertion that obstacles would be thrown by the medical profession in the way of carrying out this scheme. The present difficulty consists in giving the proposal a tangible shape.

P. L. S., (Preston.)—1. Yes.—2. Erichsen's or Bryant's Surgery; Aitken's Medicine; Carpenter or Kirkes' Physiology; Gray or Wilson's Anatomy.

ON CHRONIC ULCER OF THE STOMACH.

To the Editor of THE LANCET.

SIR,—The following cases form an interesting pendant to those so recently narrated in THE LANCET by Dr. Wardell. One of them occurred eleven years ago, whilst I was a student; the other has just recently happened. Both the patients were males, and in both a post-mortem examination was made.

A. B——, a farm-labourer, aged fifty-two, tall, thin, and pale, had been for some weeks suffering from dyspepsia, without any vomiting of blood, when one evening he was seized with what was thought to be colic. His medical man was sent for; but, being unable to attend, asked me as a friend to visit the patient for him, having previously sent him two calomel pills and some antispasmodic mixture. On my arrival the patient was dying, and expired in great agony in seven hours after the seizure of intense pain.

I made an autopsy the next day, and found in the lesser curvature of the stomach, about two inches from the pylorus, a circular, clean punched-out hole, about the size of a crow-quill. Near this aperture, on the internal surface of the stomach, were two spots, each about the size of a threepenny piece, where the mucous membrane was absent, and the thin, transparent muscular coats alone remained.

Of the second case I have a better history.

W. C——, aged eighteen, farm-labourer, a tall, growing, fairly well-developed young man, was examined by me about thirteen months since for a benefit club, and passed as sound. He was in his usual health until the morning of the 23rd of May, when he came home from his work at eight in the morning, complaining of not feeling well. Following the usual custom in these parts, his mother administered to him half of a penny packet of jalap, she having previously taken the other half of the packet herself. This dose, to use her own words, "worked him well," and he went to bed in the evening, seemingly better, had a little sleep, and in the morning at six vomited some clear greenish fluid mixed with mucus, but no blood. At seven in the morning of the 24th he appeared worse, and I was sent for; but before my arrival he had expired at half-past nine, after much pain, which seemed to have abated before his death.

An inquest was held, and at the post-mortem the following conditions were found:—The body was that of a well-nourished lad. Rigor mortis strongly marked, and decomposition far advanced, considering that only fifty hours had elapsed since death. A good layer of fat covered the abdominal muscles. The peritoneum nearly everywhere presented traces of commencing inflammation. The cavity of the abdomen contained about three pints of dark, semi-feculent fluid. The stomach was empty. At about three inches from the cardiac orifice, and one from the lesser curvature on the anterior surface, was a circular aperture, about the size of a sixpence, cleanly cut, and the portions of the stomach walls surrounding the opening were extremely thin. No other morbid appearances presented themselves in the body.

This last case shows that rupture of the stomach may take place in a seemingly healthy person, as from minute inquiries I cannot find that the lad had ever complained until the day before his death, and his symptoms then were so slight that, although I live five miles off, and was seen to pass the door at seven in the evening, they did not think it necessary to call me in. It also, I think, shows the use and advisability of post-mortem examinations in cases where an inquest is held, which many legal coroners in the present day are apt to avoid instituting, but with our coroner more enlightened views hold sway.

Yours &c.,

Southminster, Essex, June, 1877. ARTHUR LATTEY, L.R.C.P. Lond.

Mr. Alex. Duncanson.—The advertisement is not in good taste, and the accompanying paragraph is in worse.

C. M.—We entirely agree with our correspondent. The matter is commented upon in an annotation.

Dr. Steele.—The notice shall appear next week.

"CHRONIC PEMPHIGUS."

To the Editor of THE LANCET.

SIR,—In all probability the obstinate case of chronic pemphigus described by your correspondent in THE LANCET of May 26th, was partially due in the first instance to an acrid principle retained by the kidneys, and thrown out by the skin in the above form—an uncommon cause, but mentioned by some authors on cutaneous diseases. I would recommend him to have the patient put into a tepid bath for about an hour two or three times a week of the following composition:—Bath; Powdered starch; bichloride of mercury, two drachms; creasote, one drachm; hot water to a pint. Mode of using: one pint to thirty gallons. Also to apply an ointment to those parts in which the bullæ have collapsed and left an excoriated surface—viz.: Prepared calamine, one drachm; solution of diacetate of lead, ten minims; diluted sulphuric acid, ten minims; glycerine, twenty minims; benzoated lard, to one ounce; to be applied both before and after the bath. The patient should be then dabbed dry, not rubbed, and the raw and exposed surfaces of the skin should be dusted with the following powder by means of a down puff:—Powdered starch, powdered calamine, of each one ounce; subnitrate of bismuth, two drachms. The local treatment, combined with chalybeate tonics, vegetable bitters, quinine, and a little opium, with an occasional diuretic, I think he will find, with careful attention as to diet &c., with residence in a high situation, a dry atmosphere, a fair proportion of sound light French wine when obtainable, will perhaps lead to less disappointment than he has as yet experienced.

I am, Sir, yours faithfully,

JAMES STARTIN,
Surgeon to St. John's Hospital for Diseases of the Skin, Leicester-square.

Sackville-street, W., May 31st, 1877.

P.S.—Of course the bullæ should be punctured, and the fluid absorbed.

Fee.—The case is a new one, as far as we remember; but the midwife was clearly acting for and on behalf of the husband, who should pay the fee, and be summoned to the County Court if he fails to do so.

PERIOSTEAL SURGERY.

To the Editor of THE LANCET.

SIR,—With reference to your article on Periosteal Surgery in the United States, I beg to send a few particulars of a case which I fancy closely resembles that mentioned by Professor Langenbeck.

When I commenced to dress under Mr. Savory at St. Bartholomew's Hospital in the year 1873, there was then under his care a boy, aged about nineteen, who some months previously had suffered from necrosis of the whole of the lower jaw. This patient, like the one mentioned by you, had been working in a match factory. The lower jaw had been removed *in toto* by Mr. Savory in the usual manner, the periosteum being left *in situ*. The patient was under my observation for some two months. He was subject to attacks of erysipelas, and ultimately died of that and the exhaustion caused by the profuse discharge consequent on extensive necrosis and caries of the face bones.

With some difficulty Mr. Mills, the then house-surgeon, obtained permission to make a post-mortem examination. We removed an entire new lower jaw which had formed (very perfect in shape); also we made a section, taking in the greater part of the frontal bone, the malar bones, the superior maxillary bones, and those bones forming the orbit. There was extensive disease of all. The specimen was mounted, and is now, I believe, to be seen in the St. Bartholomew's museum.

I write from memory, but the main facts and data are correct.

Yours faithfully,

May, 1877. CECIL CURWEN, M.R.C.S.

"CHLORAL IN INSANITY."

To the Editor of THE LANCET.

SIR,—In your leading article in last week's LANCET, on Chloral, it is assumed that this drug is largely used in asylums, simply to keep patients from being noisy and troublesome, and to the exclusion of better and more scientific treatment. I believe a more unfounded accusation was never made, and, as the superintendent of one of the public asylums of this country, I beg to say such is not the practice here. Almost the only use I make of chloral is to give a dose at night to secure sleep in certain cases. I know most of the English asylums, and believe that the patients are treated in them with as much intelligence as in the general hospitals, and that medical treatment is not ignored in the way some learned critics assume it to be.

Yours &c.,

G. M. BACON.

Cambridgeshire Asylum, Fulbourn, near Cambridge, June 5th, 1877.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Macnamara, London; Dr. Brown-Séquard, Paris; Mr. J. Hogg, London; Dr. Gairdner, Glasgow; Dr. Fenwick, London; Mr. Wylie, Stewarton; Dr. A. Day, Barnstaple; Dr. Ross, Manchester; Mr. Dickson, Birmingham; Dr. Wyld, London; Mr. Curwen; Dr. Kerr, Peckham; Messrs. Baiss Brothers, London; Mr. Arnison, Newcastle-on-Tyne; Mr. Johnston, Newcastle-on-Tyne; Dr. Squire, London; Mr. Garson, Gilmerton; Mr. Craven, Southport; Captain Kennett, Greenock; Messrs. Wilcox Brothers, London; Dr. Ridge, Enfield; Mr. A. Stooke, London; Mr. Meadows, Hastings; Dr. Brown, London; Dr. Kidd, London; Mr. Wickham Barnes, London; Mr. Hay, Hull; Dr. Posnian, Kingsland; Mr. Duncanson, Edinburgh; Dr. Bell, Glasgow; Mr. Holt, Tiverton; Messrs. Rahusen and Macnicoll, London; Mr. Bischof, London; Mr. Banks, Liverpool; Mr. Rothery, Cheltenham; Mr. MacCormac, Sydenham; Mr. Ralston, Ardsheelach; Surgeon-Major Sinclair, Secunderabad; Mr. Keith; Dr. Bacon, Fulbourn; Surgeon Lucas, Bushire; Mr. Holman; Mr. Thorn; Mr. Adams, Sydenham; Mr. Moreton; Mr. Davies; Dr. Smith, Kilburn; Mr. Whitford; Dr. Yeo; Mr. Hodgkins, Offord; Dr. Bull; Dr. Brown, Rochester; Mr. Gale; Mr. Leake; Mr. Collins, St. Columb; Mr. Johnson, York; Mr. Swinton, Mickleton; Dr. Smith, Fall River, Mass.; Mr. Cawthra; Mr. Beckingsale, Newport; Mr. Stride, Brighton; Dr. Hodgkinson, Clearmont; Mr. Jones, Rotherham; Mr. Johnson, Croydon; Mr. Cooper; Dr. Liebreich, London; Mr. Lampen; Registrar-General of Edinburgh; A. M. D.; Senex; Medicus; Truth; Nemo; E. T. M.; A. B. M.; C. W.; M.R.C.S.; Exanthem; A Father; G. P. B.; A Country Surgeon; C. J.; The Registrar-General of Births and Deaths; Medical Officer of Health; L.R.C.S.I.; The Secretary of the Epidemiological Society; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Coleman, Surbiton; Mr. Butler, Abingdon; Dr. Rogers, Malvern; Mr. Hinde, Wolverhampton; Mr. Dunston, Shefford; Messrs. Porteous and Co., Glasgow; Mr. Spalding, Cambridge; Mr. Harrison; Mr. Jones, Birmingham; Surgeon-Major Ferguson, Ballincollig; Mr. Taylor; Dr. Chessall, Horley; Dr. Fryer; Mr. Simpson; Mr. Ramsay; Mr. Masters, Thrapstone; Mr. Thompson; Mr. Brooks; Mr. Chapman, Ludham; Dr. Harris, Camborne; Mr. Young, Wakefield; Mr. Youd; Mr. Coombs, Bootle; Mr. Randall, Bridgend; Dr. Crew, Alderley-Edge; Mr. White, Norwich; Mr. Russell; Mr. Lamb; Mr. Cooper, Needham Market; Omega, Littleborough; E. H. A., Eccleshall; Borneo; L., Felling-on-Tyne; R. H. A.; Medicus, Paddington; Z., Sheffield; M.R.C.S., Brighton; Medicus, N.; A. B.; M. M. Q., Norwood; Surgeon, Gloucester; M.D., St. Albans; J. S.; J. R., Finsbury; J. M.; Alpha, Barnsley; M.D., King's-cross; X. Y. Z., Stanley; M.D. Burslem; W. H., Notting-hill; Practitioner; M. B., Bingley; Medicus, Littleport; H.; M.R.C.S., Bayswater; K., Derby; Liverpool.

Financial Opinion, Examiner, Welshman, Sanitary Journal for Scotland, Metropolitan, Sanitary Inspector, Civil and Military Gazette, Pioneer, Colonies and India, Record, East Anglian Daily Times, West Briton and Cornwall Advertiser, New York Medical Record, and *Mid-Weekly Hampshire Independent* have been received.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, JUNE 7TH, 1877.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall	Remarks at 8.30 A.M.
June 1	29·44	S.	53	56	81	59	55	0·06	Raining
" 2	29·89	S.W.	52	53	70	65	52	0·02	Overcast
" 3	29·84	S.W.	58	64	113	80	49	...	Fine
" 4	29·79	S.W.	56	60	117	82	55	...	Hazy
" 5	29·94	W.	53	59	105	70	54	...	Cloudy
" 6	30·06	S.W.	52	60	99	66	49	...	Fine
" 7	30·18	W.	51	58	108	69	46	0·04	Fine

Medical Diary for the ensuing Week.

Monday, June 11.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND. — 4 P.M. Prof. R. Brudenell Carter, "On Defects of Vision which are remediable by Optical Appliances."

Tuesday, June 12.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, June 13.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND. — 4 P.M. Prof. R. Brudenell Carter, "On Defects of Vision which are remediable by Optical Appliances."
EPIDEMIOLOGICAL SOCIETY. — 8½ P.M. Election of Officers &c.—Surgeon-Major Colville, "On Plague in Baghdad."

Thursday, June 14.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, June 15.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND. — 4 P.M. Prof. R. Brudenell Carter, "On Defects of Vision which are remediable by Optical Appliances."

Saturday, June 16.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

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